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Abstract. *The aim of off-campus educational activity guides are to expand the knowledge of participants; however, visitors often rate tours according to the quality of their experience, rather than by what they have learned. Thus, ensuring that visitors are engaged requires that tour guides be able to identify the needs and expectations of visitors. This study sought to contextualize campus tours using four dramaturgical elements: "Actors" (tour guides), "audience" (visitors); "setting" (campus); "performance" (the tour). Dramaturgy and cognitive scripts were combined to form the research basis of this study. Free association models were employed to rank the sites subjects most wish to visit and service blueprints were used to illustrate how campus tour services should be organized and delivered. This study provides a comprehensive analysis of the processes used to decipher complex service encounters as well as concrete examples of their application.*

Key words: *cognitive script, field trip, informal education, theatre, tour guide, visitors*

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THE ROLE OF COGNITIVE SCRIPTS IN THE ORGANIZATION OF CAMPUS TOURS

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Introduction

The interaction between guides and visitors is the main focus of off-campus educational activities such as field trips and tours of fairs and museums. Guides must understand the needs of visitors, effectively present the site being visited, and meet the expectations of visitors. The aim of these efforts is ultimately to improve the knowledge of the public. Due to lack of professional knowledge, however, visitors often rate the tour based on how they feel about the experience rather than whether they actually acquired knowledge (Tu, Blocher, & Roberts, 2008).

Previous studies on service encounter and customer satisfaction were generally based on the expectation-disconfirmation perspective, using quantitative attribution methods for research. The problem with this method is that it only reveals the elements that affect customer satisfaction rather than how these factors operate (Stauss & Hentschel, 1992). Grove and Fisk (1983) used the service theatre as a metaphor for the interactive process of service encounter, which pointed research on service encounter in a new direction. However, they failed to provide or verify a specific research framework.

An impersonal style should be used to the work of previous researchers when setting the dramaturgical service context for



campus tours (Grove & Fisk, 1983; Grove, Fisk, & Bitner, 1992; Grove, Fisk, & Dorsch, 1998). We then adopted the role perspective of Solomon, Surprenant, Czepiel, and Gutman (1985) to analyze the interactive process of service encounter from the respective viewpoints of visitors and tour guides. The cognitive script approach developed by Alford (1993) was then used to identify the cognitive service scripts of visitors and tour guides and compare the differences between the two, the results of which formed the research framework of this study. We then used service blueprints to illustrate how the campus tour services were organized and delivered.

Research Hypotheses

Grove et al. (1992) indicated that in a service theatre, actors and audience create the script based on their respective roles and then follow this script throughout the performance. Bitner, Booms, and Mohr (1994) felt that in many routine service encounters, particularly those involving experienced customers and staff, the roles are well defined and each party is aware of the expectations of the other. Solomon et al. (1985) posited that service encounter is the psychological representation of the interaction between providers and recipients of service, with each party playing a specific role to achieve a specific aim. In the research of Bitner et al. (1994; 1990), the findings based on customer perspective differed significantly from those based on the perspective of service staff. This study hypothesized that in the service encounter of the *National Pingtung University of Science and Technology* (NPUST) campus tour, visitors and tour guides have different cognitive scripts due to the different roles they play. The three research hypotheses of this study are as follows:

Hypothesis 1: In the routine service encounter of the NPUST campus tour, a visitor with consumer experience is equipped with a cognitive service script prior to the encounter.

Hypothesis 2: In the routine service encounter of the NPUST campus tour, a tour guide with service experience is equipped with a cognitive service script prior to the encounter.

Hypothesis 3: In the routine service encounter of the NPUST campus tour, visitors and tour guides have different cognitive scripts due to the different roles they play.

Literature Review

Dramaturgy

Dramaturgy basically means the combination of wording and concepts of theatrical value such as setting manipulation and pretend play to induce a large sense of on-stage interaction among the participants (Grove & Fisk, 1983). The symbolic meaning is the main attraction for this study which was originally developed by Goffman (1959, 1974, and 1983) and Grove and Fisk (1983, 1992, and 1998).

First off, using the micro-analytical method to explore the essence and meaningfulness of human behaviours is basic. As Goffman (1959) used such method to discover the metaphor behind theatrical dramas or dramatization in many situations. The symbolic meaning is mostly relevant to social interactions and inter-personal relationship, the importance on which precedes those of orders. Through the micro-analytical discussion, the theatrical impression emphasizes the ingrained role of face-to-face interaction in social life. For instance, a simple human behaviour can symbolize a specific scene of a performance. The actors hope to see the audience' reaction post-performance, of which is understandable by virtue of their expectant individual behaviours. Moreover, the core concept of Goffman's expectant theory encompasses the structure of stage performance and actor-audience interaction. These factors in modern theatres have been ritualized. For instance, Dierking, Falk, Rennie, Anderson, and Ellenbogen (2003) proposed that stage setting and actors the most inseparable component of stage performance. Their interactions generally lead to the discovery of a new aspect of the reutilization. In many cases, the new discovery proves to be a ruby in the rough as far as progressive theatre is concerned. Based on this, Goffman's theory consists of three phases— the front, the back and the periphery. The front includes all the obvious elements impor-



tant to both the actors and audience such as props, costumes, makeup, behaviours and expressions. The back mainly refers to the phase where actors rehearse, break, prepare and discuss their ideas and visions while the periphery include the extra elements that are not included in the front or back areas. Secondly, service ritual is basically the process in which ones use role analysis to gain insights about human behaviours, social expectation between them. In the first years when service ritual was introduced to the public, Goffman emphasized the role and function of face in modern society indicating socialization is part of the ritualized performance. Later researches confirm the support and usage of face in many dimensions of social life. For instance, one expresses his feelings and emotions through behaviours while facial expression is hard to be detected but is inevitable in all kinds of human interaction (Goffman, 1974). In this light, campus tours are essentially another way of impression management through intentional guide and manipulation of settings and even behaviours. The definition of the guide and tourists on campus tour varies and depends on the choice of campus promotion. Thus, Goffman thinks that before designing a set of campus tour strategy, the campus administrative must the type of impression.

Most of the dramaturgical theories rely on the apparent factors used by the scientific researchers to be effective. On one hand, the consumers and audience are the basic roles for whom the campus tour is provided. The metaphoric service needs to be interpreted on a subconscious level by both the service provides and acceptors. On the other hand, Grove and Fisk (1983) thought the interaction between the service providers and consumers is somewhat similar to that in dramaturgical dimension. For instance, the audience and actors (service providers and consumers) will function accordingly based on the different of their cognitive scripts. In this aspect, Grove and Fisk (1983) synthesized the views in both the dramaturgical and service areas and find that the comprehensive setting of service can be divided at least into the front and back areas. According to Wecker and Fischer (2011), the aforementioned theories are also presented in the review which centres on how the dramaturgical strategy can evoke the most important elements for campuses to improve the dynamic chemistry relation among audience, actor and setting. It should be pointed that the core element of service sector is that the service provider knows how to use the resources to construct a satisfaction-prone environment and employed professional guides to generate more positive feedbacks.

In this light, this study combines the relevant dramaturgical theories into the approach to analyzing campus tour strategies. The design of these strategies mostly regard the campus condition as setting, tour guides as actors and understandably the audience as the visitors. All in all, the approach using dramaturgical elements need to assess the impact of the factors as far as the service process is concerned (Feher & Rennie, 2003).

Theory and Concept of Cognitive Script

The basic theory of cognitive script is based on the most general principles of psychology with the exception that they only provide a viable explanation for the cognitive differences (Carlson & Carlson, 1984). Moreover, the theory of cognitive script basically will present all the scripts possible by human beings. In the initial stage, the analysis of each unit of setting is the basis for interpreting an event and the incidents that can be idealized. With the specific identification of time, location, behavior, affective elements, environments and surrounding personnel, the psychological functions can be altered. In the setting where the effect takes place, there must be a person that inflicts the psychological manipulation and one to be affected (Kobbe et al., 2007).

Schank (1975) pointed out that our reconceptualised impression can be compartmentalized. For instance, an order of an event can be reorganized deliberately as long as the subjects are aware of the process (Chan, Chiu, Lam, Pang, & Chow, 1999; Schank & Abelson, 1977). The order or the reorganized event can be called rearranged script. The operation of a cognitive script is defined by all the circumstances known to the audience and actors (Schank & Abelson, 1977). As far as daily life experience is concerned, knowledge is essentially the active structure of existing habits and orders. Moreover, the cognitive script is the link between fragmented activities or ideas. In this light, Bower, Black, and Turner (1979) claimed that the order of behaviours, role and props can be combined to



generate a more constructive information. Mandler (1982) defined cognitive script in relation to the so-called basic continued model which is the modified version of planned model. In terms of the structure of cognitive script, it comes from a pre-constructed psychological concept. For instance, Bitner et al. (1994) studied the airline industry, hospitality industry and catering industry in the U.S and found that the key factor to accumulating the most customers is as the following order: 1) the employees know how to deal with the issues in transaction; 2) the employees role-play customers to gain more perspectives and 3) the employees know how to respond to solve customers' problems (Bitner et al., 1994; Bitner et al., 1990). Alford (1993) analyzed the usage of cognitive script in relation to service satisfaction and provide another angle to understand the role of cognitive script in modern service provision. The so-called service provision is the analogy of the order of the events adopted by the customer instead of inducing by the predesigned script. When an event is unpredictable, then there are many internal factors that have caused the shared script to be ineffective (Oliver, 1980). Most researchers' orientation rests on the interactive dilemma in educational sector. If the evaluated service and potential improvement on campus tours run in the opposite direction, there will be significant gap (Maclellan, 2004; Schmidt, 2008).

The concept of the service theatre, proposed by Grove and Fisk (1983), led to further research on service encounter and customer satisfaction. Solomon et al. (1985), described only the viewpoint of role theory, failing to provide specific research framework and methodology. If we could integrate the perspectives of various researchers and build a dramaturgical framework for analyzing service encounter, this could be used to specifically describe the interactive process of service encounter and assist both parties in learning how to engage in appropriate role behaviour. The results would aid in controlling the quality of service encounter and provide valuable contributions to both the commercial service industry and academia.

Service Blueprint and Exploring the Terminal-based Service Provision

The blue print of service, in a word, can be used to describe the process of service provision and acceptance and it in some case is a visible form to the service providers. In addition, as far as its function is concerned, the point-to-point service exchange is reflected on the process because the flow of information and communication are involved with the interaction in the rest of the service terminals. Zeithaml, Parasuraman, and Berry (1990) thought that these terminals are also decision-making points wherein the service blueprints are simplified for the administration sake. For instance, when there is a potential dysfunction in a service terminal, it is shown on the blueprint. In this light, Shostack (1984) proposed the several famous key factors of constructing a service blueprint: 1). *locating the process*. Once there is very distinguished line that separates the pre and post-service regions, the process can be located. The pre-service region includes guide and tourists and the visual interaction during the touring process. The next region is basically the moving line that encompasses the reservation, interactive exchanges. And the last line is primary the involvement of management (Nielsen, Nashon, & Anderson, 2009); 2). *Different types of Contacts during Touristic interaction*. Most likely, the procedural presentation of the activities and local campus culture is very flexible as it depends on the number of attractions and tourists and the size of the campus accessible. These elements directly lead to the various contacts and interaction between tourists and guide and 3). *Improvement based on analysis of dysfunctional stations*. To some degree, the analysis of the destination is in line with the intention to maintain a high consistency in service quality and tourist feedback. In short, it is to reduce negative influence through word-of-mouth or other types of fast-spread communication. Afterwards, the management can assess the negative comments at each possible point and improve that specific service provision point.

Campus Tour – Using NPUST as a Case Study

The development of the service industry in campus context has drawn increased attention to the concept of "service encounter", which is considered a core component of service marketing. Ac-



ording to Solomon et al. (1985) "service encounter" referred to the interaction between the visitor and the service provider during the service delivery process. Service encounter emphasizes the importance of allowing visitors to assess the service delivered, such that the service provider manages these impressions in relation to service quality. The theoretical basis of previous studies on consumer satisfaction is built on the expectation-discrimination model. Levels of satisfaction are determined by comparing the degree of consistency between the pre-purchase expectations of consumers with post-purchase perceived performance (Oliver, 1980). Grove and Fisk (1983) indicated that the process of service encounter involves interaction between clients and staff with many similarities to dramaturgy. As a result, the dramaturgical viewpoint has been used to interpret the interactive process of service encounters using a case study rooted in the National Pingtung University of Science and Technology. To contextualize campus tours at the place, this study utilized four dramaturgical elements proposed by Grove: "Actors" (service providers – tour guides); "audience" (recipients of service – visitors); "setting" (location of service or service environment); "performance" (the service itself – service encounter).

NPUST Agricultural and Ecological Education Tour

Introduction. The National Pingtung University of Science and Technology (hereafter referred to as NPUST) is located in the Dawu foothills of Laopai Village, Pingtung County. It has the largest campus area of all universities in Taiwan and has been praised as the "National Park University" for its natural beauty. Apart from faculty buildings, the university is also equipped with an ecological park, an outdoor learning facility for soil and water conservation, and a botanical garden. To encourage stronger ties with the community, NPUST developed the agricultural and ecological education tour, during which visitors are guided through campus sites that are educationally meaningful, such as the protected species shelter, farm equipment exhibition, outdoor learning facility for soil and water conservation, and tropical/subtropical orchards. Based on the requirements of visitors, the tour can be completed in one or two days, with the university providing meals and lodging.

Agricultural and Ecological Education Tour. Individuals who wish to participate in the tour can download an application form from the NPUST website for submission at least three weeks prior to the tour date. During summer and winter school holidays, visitors can make a booking by phone from Monday to Thursday and then fax or email the application form to the university's promotional office. The university then arranges for guides according to the sites selected on the application form and requires payment of the tour fee one week prior to the tour. The main tour sites are described below:

- *Protected species shelter:* Since its establishment in 1992, the shelter has rescued and cared for more than 2,000 protected and non-protected animal species. The site is professionally presented by tour guides and the Shalin Life Education Centre is also introduced.
- *Farm:* A variety of animals such as dairy cows, beef cows, pigs, laying hens, broilers, chickens, and stray dogs are raised in this sprawling establishment covering 40 hectares (including grazing land). The farm also includes a technical training centre, halfway home for stray dogs, and a livestock waste management centre. Apart from providing students and visitors with the opportunity to observe livestock up close, the farm also provides students of animal husbandry and farmers with an excellent training and practice facility.
- *Farm machinery exhibition:* Using pictorial displays, models and multimedia methods, the exhibition systemically presents the tools and machinery used in agriculture, fishery, animal husbandry and rural life in each stage of development. The exhibition aims to help visitors understand and appreciate the achievements of our ancestors in agricultural science.
- *Outdoor learning facility for soil and water conservation:* This facility is an experimental research and educational facility established in partnership with relevant government departments. It is an excellent venue for outdoor learning in relation to soil and water conservation.



- *Vanilla garden*: Established in 1991 as Taiwan's first vanilla garden, it is not only used for research purposes but also opened to the public as an educational venue.
- *Meditation lake*: Ecological engineering methods were used to improve the surrounding stability of the wetlands and aquatic plant restoration techniques were applied to provide organisms with a stable habitat.

Methodology of Research

This study investigated the interactive process of service encounter from the respective viewpoints of visitors and tour guides. We employed the cognitive script approach proposed by Smith and Houston (1985) to identify the cognitive service scripts of visitor and tour guides and compared the differences between the two. The results were used to construct an analysis framework based on service theatre for service encounters, in order to explore its interaction process. Individual cognitive scripts were used to obtain data on individual action. This study employed the service blueprint concept to illustrate the overall process and various stages of service encounter, to allow both parties to understand the potential behavioural model of the other. A behavioural guide can be derived based on the cognitive service script, to prevent unexpected conflicting behaviour.

Sample

Most people are relatively familiar with and/or have participated in school or museum tours. With the assistance of the NPUST General Education and Continuing Education Departments, we used convenience sampling to interview 120 students, major in different discipline from departments in NPUST. The subjects (informants) were given 50 minutes to complete the questionnaire before it was written about an interview. This study recovered 120 questionnaires, making a recovery rate of 100%; the number of valid samples was 104, making a valid sample ratio of 86.67%.

We adopted a standardized process for the questionnaire survey, in order to infer more accurately whether the visitors were equipped with the concept of cognitive script during the service encounter. Subjects expressed why they felt satisfied or dissatisfied with specific events based on their past experience and described problems they had encountered in the service process (Mortensen & Smart, 2007).

Script Analysis

Based on the recursive self-assessment scale proposed by Bower et al. (1979), this study employed a recursive approach to analysing scripts process was divided into three steps: The script resulting from the three step process described above can be considered the standard cognitive script of a majority of subjects. Using the service blueprint to establish the service process The service blueprint described in the literature review was used to deconstruct the tour service process, creating an easy to follow graphic, as shown in Figure 1. This study also provides a feasible strategy to improve the quality of tour services.



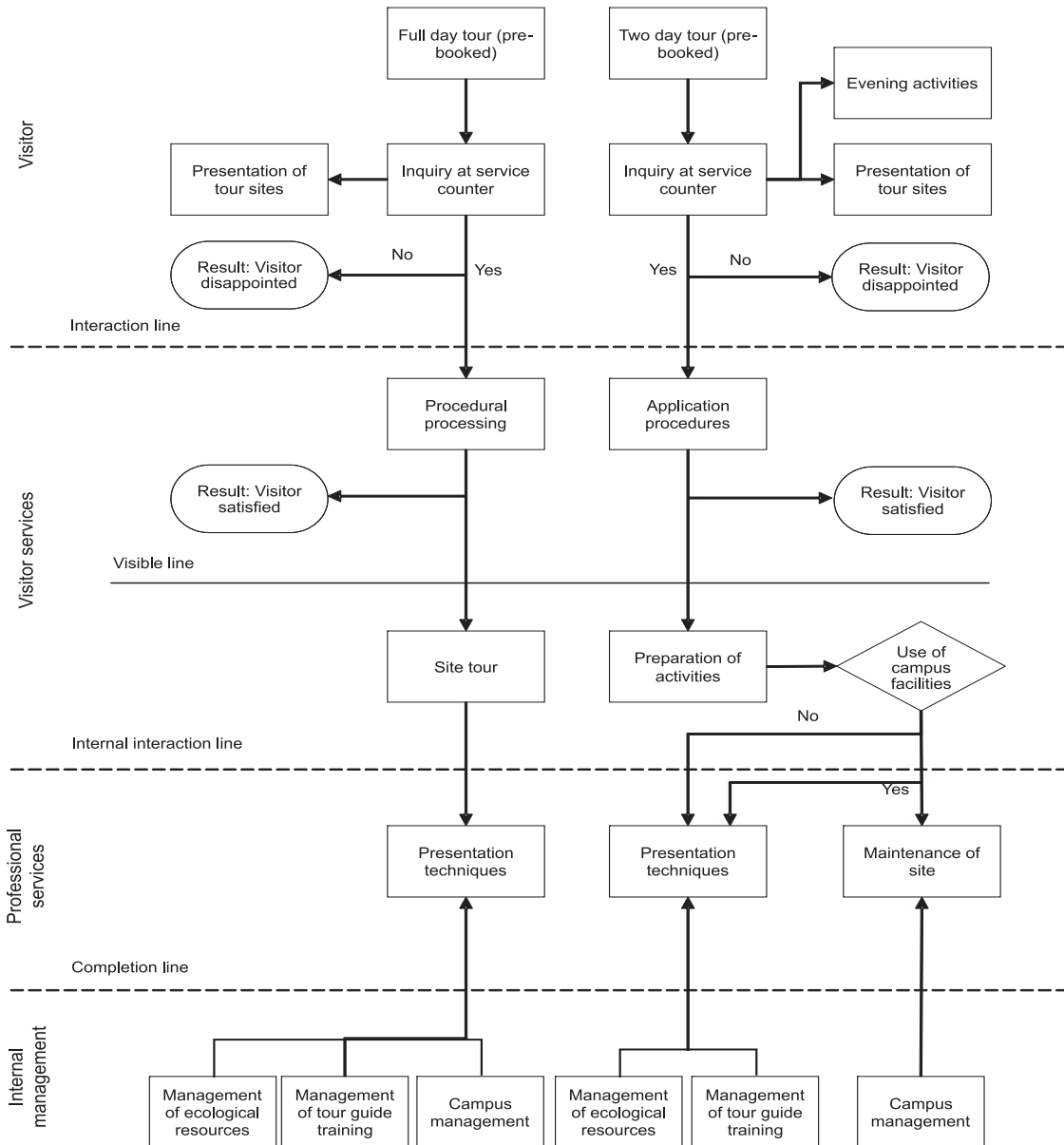


Figure 1: Agricultural and ecological education tour.

Results of Research

Free Association

We sought to understand the order of NPUST sites by allowing subjects to select and rank sites. A review of recovered data revealed that only the protected species shelter had complete data; all other sites had some uncompleted areas. Table 1-3 shows the ranking of sites by research subjects.

Table 1-3 shows that 51.9% of subjects ranked the protected species shelter as a priority site to visit; the second most highly ranked site was the farm (23.1%), followed by the botanical garden (19.2%),



the vanilla garden (13.5%), the tropical and subtropical orchards (13.5%), the mediation lake and farm equipment exhibition (9.8%), the visitor reception hall (9.6%), and finally the medicinal plants garden, soil and water conservation facility, and wood science/industrial art exhibition centre (7.7%).

Table 1. NPUST site ranking (N=104).

Order	Protected species shelter		Botanical garden		Vanilla garden		soil and water conservation facility		Farm		Lover's slope	
	N	%	N	%	N	%	N	%	N	%	N	%
1	54	51.9	8	7.7	8	7.7			8	7.7	6	5.8
2	16	15.4	2	1.9	6	5.8	4	3.8	24	23.1	10	9.6
3	8	7.7	20	19.2	14	13.5	4	3.8	8	7.7	4	3.8
4	8	7.7	12	11.5	18	17.3	4	3.8	4	3.8	8	7.7
5			16	15.4	6	5.8			10	9.6	10	9.6
6	2	1.9	4	3.8	12	11.5	2	1.9	2	1.9	12	11.5
7	4	3.8	4	3.8	6	5.8	6	5.8	4	3.8	6	5.8
8			4	3.8	6	5.8	6	5.8	8	7.7	8	7.7
9	2	1.9	6	5.8	6	5.8	8	7.7	8	7.7	4	3.8
10	4	3.8	6	5.8	2	1.9	10	9.6	2	1.9	6	5.8
11			8	7.7	6	5.8	6	5.8	2	1.9	4	3.8
12			4	3.8	4	3.8	8	7.7	2	1.9	4	3.8
13					2	1.9	4	3.8			2	1.9
14					2	1.9			4	3.8	2	1.9
15							10	9.6	2	1.9		
16	2	1.9	2	1.9			2	1.9	2	1.9		
17					2	1.9	6	5.8	4	3.8		
18	4	3.8					4	3.8	2	1.9	4	3.8
Deficiency			8	7.7	4	3.8	20	19.2	8	7.7	14	13.5

Table 2. NPUST site ranking (N=104).

Order	Tropical and subtropical orchards		Medicinal plant garden		Sports field		Sports hall		Swimming pool		Farm machinery exhibition	
	N	%	N	%	N	%	N	%	N	%	N	%
1							2	1.9				
2	4	3.8	2	1.9			2	1.9	4	3.8		
3	6	5.8					2	1.9	2	1.9	2	1.9



Order	Tropical and subtropical orchards		Medicinal plant garden		Sports field		Sports hall		Swimming pool		Farm machinery exhibition	
	N	%	N	%	N	%	N	%	N	%	N	%
4	8	7.7	6	5.8			2	1.9			2	1.9
5	14	13.5	6	5.8	6	5.8	2	1.9			6	5.8
6	10	9.6	10	9.6			4	3.8	2	1.9	8	7.7
7	10	9.6	4	3.8			6	5.8	2	1.9	10	9.6
8	10	9.6	10	9.6			6	5.8	6	5.8	4	3.8
9	4	3.8	8	7.7	4	3.8	6	5.8	2	1.9	8	7.7
10	6	5.8	2	1.9			10	9.6	4	3.8	2	1.9
11	6	5.8	4	3.8	8	7.7	2	1.9	6	5.8	8	7.7
12			12	11.5	2	1.9	6	5.8	8	7.7	6	5.8
13	6	5.8	2	1.9	18	17.3	14	13.5	6	5.8	4	3.8
14			10	9.6	10	9.6	8	7.7	16	15.4	4	3.8
15	2	1.9	4	3.8	10	9.6	10	9.6	10	9.6	10	9.6
16	2	1.9	4	3.8	10	9.6	2	1.9	6	5.8	10	9.6
17	4	3.8	6	5.8	6	5.8	4	3.8	2	1.9		
18	4	3.8			6	5.8	2	1.9	6	5.8	6	5.8
Deficiency	8	7.7	14	13.5	24	23.1	14	13.5	22	21.2	14	13.5

Table 3. NPUST site ranking (N=104).

Order	Library		Mediation Lake		Wood science and industrial arts exhibition centre		Visitor reception hall		First restaurant		Second restaurant	
	N	%	N	%	N	%	N	%	N	%	N	%
1	2	1.9	10	9.6			4	3.8	2	1.9		
2	2	1.9	20	19.2	2	1.9			2	1.9	4	3.8
3	6	5.8	10	9.6	4	3.8	10	9.6	2	1.9	2	1.9
4	6	5.8	14	13.5	4	3.8	2	1.9	4	3.8	4	3.8
5	4	3.8	10	9.6	4	3.8	4	3.8	2	1.9	2	1.9
6	10	9.6	4	3.8	2	1.9	14	13.5	2	1.9	4	3.8
7	8	7.7	10	9.6	6	5.8	6	5.8	8	7.7	2	1.9
8	4	3.8	6	5.8	6	5.8	8	7.7	4	3.8	2	1.9
9	2	1.9			8	7.7	10	9.6	4	3.8	4	3.8
10	4	3.8	8	7.7	6	5.8	10	9.6	2	1.9	8	7.7



Order	Library		Mediation Lake		Wood science and industrial arts exhibition centre		Visitor reception hall		First restaurant		Second restaurant	
	N	%	N	%	N	%	N	%	N	%	N	%
11	2	1.9			8	7.7	8	7.7	4	3.8	2	1.9
12	8	7.7			8	7.7	4	3.8			6	5.8
13	4	3.8			6	5.8	6	5.8	2	1.9	2	1.9
14			6	5.8	6	5.8	6	5.8	2	1.9	2	1.9
15	4	3.8			8	7.7	2	1.9	4	3.8	2	1.9
16	18	17.3			6	5.8	4	3.8	2	1.9	6	5.8
17	4	3.8	4	3.8			2	1.9	30	28.8	2	1.9
18	2	1.9			2	1.9			6	5.8	28	26.9
Deficiency	14	13.5	2	1.9	18	17.3	4	3.8	22	21.2	22	21.2

Comparison of Cognitive Script between Visitors and Tour Guides

This study designed a formal questionnaire based on the ranking of campus sites by research subjects. This study surveyed subjects only in relation to a full day tour, and considered nine different tour sites (protected species shelter, farm, farm equipment exhibition, wood science and industrial art centre, soil and water conservation facility, tropical/subtropical orchards, vanilla garden, medicinal plant garden, meditation lake) when comparing the tour routes.

The tour routes were ranked by visitors and tour guides, as shown in Table 4. The rankings of tour guides were then compared with those of visitors, as shown in Table 5. Tour guides and visitors were in agreement about which two sites to tour first (protected species shelter and the farm) and which site to visit last (Meditation Lake). The views of tour guides and visitors were also consistent as far as the tour sequence of the tropical/subtropical orchards, medicinal plant garden, and wood science and industrial art centre.

The main difference between tour guides and visitors was in relation to the vanilla garden. Visitors ranked the vanilla garden as the third site to visit, indicating that they wished to tour the vanilla garden prior to visiting other sites. Tour guides felt they should first tour the tropical/subtropical orchards, medicinal plant garden, wood science and industrial art centre, and lastly visit the vanilla garden. Tour guides and visitors also held different views on the order in which to visit the soil and water conservation facility and the farm equipment exhibition.

Table 4. Comparison of tour route scripts between tour guides and visitors.

Site	Tour guide			Visitor		
	Number of persons	Ratio (%)	Ranking	Number of persons	Ratio (%)	Ranking
Protected species shelter	62	59.6	1	58	55.8	1
Farm	28	26.9	2	36	34.6	2
Farm equipment exhibition	16	15.4	8	18	17.3	7



Site	Tour guide			Visitor		
	Number of persons	Ratio (%)	Ranking	Number of persons	Ratio (%)	Ranking
Wood science and industrial arts centre	20	19.2	5	20	19.2	6
Soil and water conservation facility	18	17.3	7	10	9.6	8
Tropical/subtropical orchards	18	17.3	3	20	19.2	4
Vanilla garden	14	13.5	6	16	15.4	3
Medicinal plant garden	18	17.3	4	20	19.2	5
Meditation Lake	22	21.2	9	18	17.3	9

Table 5. Compiled rankings of tour guides and visitors.

Ranking	Tour site	Tour site
1	Protected species shelter	Protected species shelter
2	Farm	Farm
3	Tropical/subtropical orchards	Vanilla garden
4	Medicinal plant garden	Tropical/subtropical orchards
5	Wood science and industrial arts centre	Medicinal plant garden
6	Vanilla garden	Wood science and industrial arts centre
7	Soil and water conservation facility	Farm equipment exhibition
8	Farm equipment exhibition	Soil and water conservation facility
9	Mediation lake	Mediation lake

Discussion

As indicated in the above tables 1-5, there are certain phenomena worthy of discussion in relation to the covered literatures. Firstly, as far as the type of tourism destination image is concerned, cognitive script is equally functional in campus tour context as it is a commercial community activity. There is no exhaustive evidence in the above analysis that shows that simplistic destination can lead to satisfactory results. The basic image of a campus is essentially the image of the campus and the attractions revolving around it. The local characteristics and the exact image also refer to the geographical differences such as cultural and historical backgrounds, and the scale tend to be larger for the cognitive script to take effect as the space of places subject to changes overall the years.

Obliviously, farms received a high score. Contact with living animals, possibility to feed them and watching the foraging behaviour. Visitors prefer animals to plants by the results (Fischer et al., 2011; Herzog & Burghardt, 1988; Leong, 2010). Special natural environment and unique cultural meaning for the development of a unique cognitive script is open for speculation as construction, culture, industry, landscape and urban planning are all parts of the regional characteristics (Fischer et al., 2011; Muter, Gore, Gledhill, Lamont, & Huveneers, 2013; Sanders, 2007).

Conclusions and Recommendations

Based on the above analysis and discussion, there are some significant conclusion to be drawn. The effect of existing script subjects to the environment of the domain itself which can be an ex-



cavated area for later image and recognition. Table 2-3 shows that tour guides effect is mainly to reflect the subconsciousness of a script. The attraction of the campus city is clearly visible and even vivid to induce a personal powerful way to remember the campus image. Stronger scripts tend to introduce and consolidate in mind the image of the force and living space with the trip. Depending on the nature of scripts, the process and evaluation criteria are highly different. In table 5, the tourists rather travel to the temporary stay. Therefore, the so-called image-related script is the force for campus recognition. The conceptualized destination evidently needs to work with the visitors' personal lives or living space to construct the campus tourism image. The unique and distinctive script can be produced relevantly as the tourists often feel strange to find similar cognitive direction to a specific location. Lastly, with a strong tourist atmosphere, the scripts mentioned in table 1-5 can continue to receive exclusive trip satisfaction thus improving the local travel service and leaving deep memories to consolidate the tourist image with visual and verbal reinforcement.

Recommendations

1. *Four recommended tour routes based on cognitive script results.* Based on the core script results and the campus regulation that a one day tour can cover a maximum of four sites, we recommend the following four routes for NPUST one day tours (Table 6):

Table 6. Recommended tour routes for NPUST one day tours.

Route	Morning	Afternoon
Route A	Protected species shelter → Farm	Vanilla garden – wood science and industrial art centre
Route B	Protected species shelter → Farm	Tropical/subtropical orchards → Medicinal plant garden
Route C	Protected species shelter → Farm	Farm equipment exhibition → soil and water conservation facility
Route D	Protected species shelter → Farm	Vanilla garden → Mediation lake

2. *The core script of NPUST tours covers nine sites.* Tu et al. (2008) proposes that using the free associations model, subjects listed the sites that they most wished to visit. After coding the results, we identified the nine sites comprising the core script of NPUST campus tours: protected species shelter, farm, tropical/subtropical orchards, medicinal plant garden, wood science and industrial art centre, vanilla garden, soil and water conservation facility, and farm equipment exhibition.
3. *Preference for animal-related sites compared to vegetation or industrial arts related sites.* Pyhek, Perse, and Sorgo (2012) also concluded that the tour guides and visitors agreed on which two sites to visit first: the protected species shelter and farm. These animal-related sites were preferred over the vanilla garden, orchards, medicinal plant garden, wood science and industrial art centre, farm equipment exhibition and soil and water conservation facility (Herzog & Burghardt, 1988; Leong, 2010). Both groups ranked the mediation lake as the last site on the tour to visit. We infer that this may be because the mediation lake is geographically located further away from the campus teaching area (Wecker & Fischer, 2011).

Research Limitations and Future Direction

Tour guides use verbal presentation, demonstration, and practice exercises when introducing each of the sites on the tour. Therefore, skills such as holding the interest of the audience, technical demonstrations, and properly executing and monitoring activities are paramount. Although the emphasis on their performance varies according to the tour site, tour guides must try to capture the attention of visitors (students) from the outset and assist them in acquiring new knowledge and broadening their perspectives (Vedder-Weiss & Fortus, 2013).

Kobbe et al. (2007) pointed out that, because script theory is more applicable to industries



with a high level of social interaction, this study used the university campus as the research context. Consequently, the results cannot be generalized to all service industries. The subjects (script analysis and case analysis) were selected using random sampling, thus the sample is not representative of the population. However, because campus tours are common experiences for junior and senior high school students, this should not cause bias in our conclusions. Also, this study only briefly outlined the cognitive script of tour participants, as a means of tangibly representing visitor expectations. We did not compare the dynamic process of service encounter between service providers and visitors. Ryszard (2013) suggests future research could study inconsistencies between the expectations of service providers and visitors and how these discrepancies influence visitor response, as well as explore the function of other interfering variables.

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