MODIFICATION OF HISTORICAL AND NATURAL HERITAGE PLACES: ACCESSIBILTY BY DESIGN FOR BARRIER-FREE CULTURALTOURISM

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SUMMARY

The world's largest growth in tourism industry is being undertaken by increasing number of People with Disabilities (PwDs) travelling to more countries and regions of the world. The new market segments are continually responding to the needs of the Barrier-Free Tourism (BFT). Tourist mobility and accessibility in heritage have become essential to a tourism quality. Quality in tourism denotes accessibility to all people, and respect of heritage sites. Thus, the need for modification and strategic responsibility will encourage economic benefits for the tourists and cultural sectors in niche market.

In the coming decade, people will enjoy the mobility-friendly transport which ensures convenient, quick and safe mobility. There are three major types of barriers to access and mobility: social barriers, psychological barriers and structural barriers. In the context of freedom from barriers, it means:

1. eliminating obstacles in the built environment and enabling access to public transport,
2. eliminating obstacles within vehicles, enabling easy boarding and alighting, and
3. making information and communication services sustainable for use by all. (1)

This paper is relevant to decision-making in order to meet the requirement of barrier-free design. The existing lifestyles of the PwDs and the quality of the environmental heritage develop independent living lifestyles in the social environment. Accessibility should be globally and integratively dealt with. It should not be the domain of built heritage and transport experts alone but should also be achieved through coordination of the entire courses of actions involved.

Key Words: Modification of built heritage; Historical places; People with Disabilities; Accessibility of transportation

PURPOSES OF THE STUDY

1. The main purpose of the study is to provide the experience of barrier-free travel for the emerging global market for persons with disabilities and senior citizens.
2. The analysis of modification of historic properties provides a fundamental context for universal design for all, and mobility and transportation of PwDs
3. New infrastructures accommodate much the needs of PwDs. Mobility and transportation can have extreme long life span, and it is important to meet the needs of disabled people.

MATERIALS AND/OR METHODS

As context statement, the research defined the GMS's boundaries involving six countries namely Siem Reap, Cambodia; Bagan, Myanmar; Luang Prabang, Lao PDR; Ayutthaya, Thailand; Nha Trang Shore, Vietnam; and Zhongdian County, and Yunnan, China PRC. Historically, many neighboring frameworks and businesses have also existed beyond these boundaries although they have been considered as historical cores. The project being presented is the continuation and expansion of the previous project on "Cultural Heritage Across Borders: Inclusive Tourism and Barrier-Free Design in the Greater Mekong Sub-Region (GMS)". The first project has established the main part of the research on barrier-free design management with integrated methodology for meeting PwDs' needs, focusing on design solution to physical barriers in heritage properties suited to the GMS areas. The second project is widening this approach by introducing the accessible mobility in heritage areas complemented by factors such as accessible transportation, urban mobility barriers and assistance to create more opportunities to journey without barriers. The research, **"Modification of Historical and Natural Heritage Places: Accessibility by Design for Barrier-Free Cultural Tourism",** is aimed at responding fully to mobility transportation and accessibility issues within historic heritage environments.

EXPECTED RESULTS

1. To develop BFT into travel and tourism markets in selected sub sectors in accessibility by barrier-free design.
2. Public awareness and cooperation are sustainable keys in solving accessibility and environmental crises as well as in enhancing people's quality of life.
3. Accessibility principles must be followed when planning, designing and building infrastructures. These require full facilities of standards or recognized best practices approved by experts, accessibility requirements for wheelchairs, features for people with walking difficulties, and facilities to assist the PwDs.

DISCUSSION

The mobility travel and transport have many aspects defined by their abilities to provide appropriate access for visitors towards destination and dispersion. Transport is acknowledged as one of the most significant factors controlling the international development of inclusive tourism. (2) It should provide an essential link between origin of tourism and destination areas and facilities. Regarding with the concept of modification of built-heritage and mobility transportation, it will be useful to see additional references. These are particularly relevant to UNESCO's criteria. The current access tourism offer does not provide a high quality destination or adequate infrastructure for PwDs' journey. Ensuring modification to effect heritage development should be achieved by coordinating actions involving public and private operators alike. The current focus of the subject is finding new adaptive heritage areas to access tourism destinations, enhancing the use of transportation and accessible control.

Existing barrier-free tourism product includes transportation, accommodation, tourism site visit and services. The increase in the number of the elderly and PwDs is requires quality services. Quality services delivered by adaptive heritage building are applicable to every individual regardless of their particular circumstances such as disabilities and special needs. In the perspective of inclusive tourism, universal design is crucial. The aspect is becoming increasingly important, especially with the emergence of new geographic entities in the tourism market.

Modification means improving the historic place to suit existing use or proposed use. The accessibility principle for modification should understand the historic, aesthetic, scientific and social values of our cultural heritage for the advantage of PwDs and future generations. It is usually not a part of the overall process of protecting or repairing character-defining features but such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be provided so as not to radically change, damage, or destroy character-defining materials.

Accessible transportation is the passport to independent living of everyone. Mobility means having transport services going where and when one wants to travel; being informed about the services; knowing how to use them; being able to use them; and having the means to pay for PwDs, sensory, or cognitive impairments.

Barrier-Free Environment assessment and Design Solutions

The proposed change should be completed through construction with local authenticity that represents a cross-disability perspective. However, accessible built environment may just be for enjoyment and leisure. These have improved the facilities in terms of vertical and horizontal accessibility by implementing necessary solutions recommendations.

Case Studies

1. Cambodia: Siem Reap

Zoning and management of the Siem Reap/ Angkor areas have classification of protected cultural sites. The cultural sites listed in this plan contain different levels of protection. Transport patterns among countries, within a country and between rural and urban areas differ considerably. Access profiles of areas describe a set of basic information about service locations and facilities including the levels of difficulties that people may undergo in gaining access to the sites.

Fig 1: The ferries are local transports, and of varied quality and comfort.
The ship does not have facilities for disabled people or wheelchair access.

Fig 2: Trekking to Kbal Spean needs crossing over the tree roots spreading through and binding the soil together. There are thick roots protruding on the ground. Rough surface of tread obstacles includes tree roots, rocks, brush, and pot-holes.

Fig 3: As relationship between nature and human, trails should follow a logical sequence to prevent the user's loss of direction. Inspection should be done and obstacles be removed as needed.

2. China PRC: Zhongdian County Yunnan

Yunnan is one of China's most visited provinces. As a result, Yunnan also offers unparalleled experience of architectural styles and decorative arts in all of China. Best of Yunnan tour brings you several of UNESCO's most cherished monuments such as Yunnan's ancient market towns of Lijiang and Dali and Shangri La.

Fig 4: This is the public bus from Laos PDR border to Kunming Yunnan, China PRC. The sleeping bus does not have enough space, inconvenient for disabled travelers.

Fig 5: Parking area is provided for buses and all vehicles, not for PwDs.

Fig 6: Clear identification of designated accessible parallel parking spaces has a wheelchair symbol. The main circulations comprise of the community space; shops are linked together with smooth external ramps and stairs.

Fig 7: Public toilet performer's facilities are accessible for public, family, senior citizens, and people with disabilities. Clear signage is located at strategic way finding locations.

3. Lao PDR: Luang Prabang

Luang Prabang is a living heritage that makes itself a unique destination in Southeast Asia. The study area is on land identified as Luang Prabang conservation area with the main of the UNESCO-built heritage, Laos's community consultation and site inspection.

Fig 8: The chaotic traffic leads to insufficient parking spaces in ancient town. With the expansion, parking vehicles obstruct sidewalk corridors.

Fig 9: Exterior stairways are designed to balance and support one from a standing position. In other case, stairways handrails are required in accessibility, considering accessibility standards.

Fig 10: The sample application after installing freestanding parking permits with a disability sign.

Fig 11: The extended handrails are useful beyond top and bottom as a safety cue for PwDs. Wooden quality custom-designed handrails are made from hardwood and stainless materials to preserve cultural heritage and to respect the heritage places.

4. Myanmar: Bagan

The Bagan Archaeological Zone is the formal name used to designate the historic region of the ancient Kingdom of Bagan. The mode of transport in Bagan is the horse-drawn cart. Roads in more remote areas are in very poor condition.

Fig 12: At the Yangon International Airport, all private and public vehicles are always parked in front of the access ramps at peak hours. Thus, the access ramp is often blocked by parked vehicles.

Fig 13: Domestic buses run between Yangon to Bagan and several cities. Myanmar bus companies supply the uncomfortable middle seats for extra passengers. These seats block the alleys on the sidewalk.

Fig 14: Inventory asset management of street trees tracks the benefits of the domestic and tourist travels around the old Bagan. Trees are very important to the environment; shade blocks high wind, and hot sun; absorbs noise; filters pollution and creates green environment.

5. Thailand: Ayutthaya

The Historic City of Ayutthaya, with all of its remains, is considered as a property of outstanding universal value and is listed as the World Heritage by UNESCO. Ayutthaya

is located in the inner city of world historical heritage land. Ayutthaya is also extremely convenient to connect mass transit between inner province and other provinces.

Fig 15: The high structures obstruct the visitors to walk through some steps, and slopes; and limit walk on sidewalk and courtyard. Now people stride over the heritage places, diminishing heritage fabric.

Fig 16: The differences in levels are limited for disabled people; using the ramp is the easiest way to achieve accessibility for all users.

Fig 17: The approach from new designated sidewalks is wide enough for wheelchair to navigate on natural stones. Tactile sidewalks are built on ground through short fine grass for anybody with vision impairment or wheelchair or parents pushing strollers through the areas.

6. Vietnam: Nha Trang Shore

On three sides, Nha Trang is surrounded by mountains, and large island on the fourth side that blocks major storms which will damage the city. Nha Trang and the neighboring area will focus on tourism development strategy as Nha Trang City has the greatest potential to develop into an attractive tourist center. Nha Trang has a beautiful natural scenery considered as cultural heritage and society.

Fig 18: The main arrival hall is on the ground floor. There are more seats that are available for all passengers. On the second floor, people can reach male and female public toilets. No specific toilet is provided for people with disabilities.

Fig 19: This town is not very accessible due to poor sidewalks having shallow *or* high and low or deep trolleys for wheelchair users reaching the beach areas. Wheelchairs could not have access to the most beautiful beaches.

Fig 20: The sidewalk environment, and signage supplemented with audible and tactile information are accessible to people with visual impairments. Extensive free public parking spaces are available in front of the entire beach. These are features for accessibility to a boardwalk beach.

Fig 21: A wide ramp and boardwalk beach trail are wheelchair accessible and provide an excellent view of the beach. The lower viewing decks can take panoramic views of the ocean.

CONCULSION

There are special problems associated with the accessibility provision for visitors with disabilities at historic buildings and ancient monuments. There should be a balance between accessibility and preservation of the site character. Accessibility should not threaten or destroy features and materials that convey the property's significance. However, in the assessment management of a building or site, it is important to recognize that disabled people have a right to expect accessibility. The application of the concept of mobility transportation and accessible tourism development are traced, including some initiatives of the cultural needs and tourism organizations. In this field, it is noted that the result emphasizes long-term plan, development of tourism infrastructure and conservation of barrier-free facilities by adopting a tourism development plan integrating management, accessibility to heritage sites, socio-economic, social and environmental sustainability of a destination as well as natural and cultural site heritage management. In recent years, however, emphasis has been placed on modification of significant historical properties, and disabilities. This issue provides accessible mobility in heritage areas and human needs to balance accessibility and historical preservation. Modification provides adaptation standard and guidelines for new innovative solution.

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