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PROTECTION OF CULTURAL HERITAGE

REFLECTING ON THE VENICE CHARTER: CONSTRUCTING AN ACCESSIBLE ENVIRONMENT FOR THE PRESERVATION OF TAIWAN'S CULTURAL HERITAGE

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ABSTRACT: This paper explores the relationship between the Cultural Heritage Preservation Act and barrier-free environments by analyzing Taiwan's cultural heritage preservation laws, interviews, and case studies. The "Venice Charter" highlights restoration and preservation, advocating that added facilities should not harm existing structures. Although Taiwan's Cultural Heritage Preservation Act includes relevant provisions, it lacks specific regulations for enhancing barrier-free environments. Generally, design standards for general buildings are adapted to the characteristics of the reused cultural asset. In the context of reusing cultural assets, especially in museums or exhibition spaces, providing "equitable service" to all users is essential. Constructing barrier-free access within cultural heritage environments is fundamental to ensuring equitable service. This involves accommodating visually impaired, hearing impaired, and physically disabled individuals with flexible alternative improvement methods to offer inclusive accessibility.

KEY WORDS: Cultural heritage preservation, adaptive reuse, accessibility, Venice Charter

1. Introduction

The "Venice Charter" proposes a set of universally significant and valuable guidelines, emphasizing the values of authenticity and integrity, valuing features from all historical periods, opposing the demolition of historical additions and unjustified stylistic reconstructions, and requiring complete documentation[1] (Ender et al., 1994). However, from a contemporary perspective, certain provisions of the Charter show some inadequacies in the context of building restoration and adaptive reuse.

For instance, according to Article 5 of the "Venice Charter," if a historic building is used for a socially beneficial purpose, it will be more conducive to its protection. However, the Charter requires that any alterations to the building's layout and decoration should be restricted and considered only under the premise of preserving the building's original features. At that time, the concept of an accessible environment was not considered.

The construction of an accessible environment is most importantly governed by the "Convention on the Rights of Persons with Disabilities" (CRPD), which was adopted in 2006 and made public on March 30, 2007. Gradually gaining international attention, this convention was agreed upon by representatives of the 192 member states of the United Nations and 90 non-governmental organizations at a special UN meeting. It has had a profound impact on the global protection of the rights of persons with disabilities and is the first international convention adopted by the United Nations specifically dedicated to protecting the human rights of persons with disabilities[2].

The purpose of the "Convention on the Rights of Persons with Disabilities" is to promote, protect, and ensure the full and equal enjoyment of all human rights and fundamental freedoms by persons with disabilities, and to promote respect for their inherent dignity. It aims to reduce the disadvantages faced by persons with disabilities in society, enabling them to enjoy equal opportunities to participate in all aspects of social life, including civic, political, economic, social, and cultural domains, aligning with the concept of "inclusion."

Particularly, the legislative intent of Article 9 of the "Convention on the Rights of Persons with Disabilities"[3] is to enable persons with disabilities to live independently and participate fully in all aspects of life. It requires States Parties to take appropriate measures to ensure that persons with disabilities, on an equal basis with others, have access to the physical environment, transportation, information and communications, and other facilities and services open or provided to the public, both in urban and rural areas.

In Taiwan, the preservation of architectural cultural heritage primarily involves the representation of national history, the representation of local history, and the marketing of historical imagery[4].

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1 Ender C., Jokilehto J., Lemaire R., Silva R. (1994). *The Venice Charter 1964-1994.* France, Paris: ICOMOS.

2 United Nations. (2014). *Convention on the Rights of Persons with Disabilities – Articles.* Herndon, US: United Nations Publications.

3 *Ibidem*.

4 Yan L.-Y. (2005). Globalization - A critical review of historic preservation theories. *Journal of Geographical Science* 42, (pp. 1-24).

However, the representation of local history and the marketing of historical significance require human participation, which involves the issue of participants being treated equally.

Moreover, the preservation of architectural cultural heritage, if involving moderate adaptive reuse such as serving as museums or exhibition halls, raises issues of providing experiences and educational outreach. Thus, preservation significance encompasses not only the preservation of the objects themselves but also the aspects that have a substantial impact on society.

From this perspective, the issue of equity becomes important when different community members (including individuals with mobility impairments, visual impairments, and hearing impairments) experience architectural cultural heritage.

It is particularly noteworthy that the focus on creating accessible environments in buildings is primarily on hardware facilities and equipment. However, when these buildings serve as exhibition spaces, the emphasis must also include educational functions, which rely on the support of information and communication technologies.

However, the original "Venice Charter" did not address this issue, and this study mainly discusses this topic from this perspective.

2. Literature Review

In Taiwan, the legislation for constructing barrier-free environments in buildings primarily references regulations from the United States and Japan[5]. Additionally, a friendly building manual has been developed to provide design guidelines for thoughtful services beyond the legally mandated barrier-free facilities[6]. However, the construction of barrier-free environments in cultural heritage sites, being distinct from general public buildings and subject to regulations prohibiting arbitrary additions of facilities, was initially not mandated to provide barrier-free environments.

Improving the accessibility of Taiwan's architectural cultural heritage faces numerous challenges, including the lack of a comprehensive strategy for enhancing accessibility, the absence of integrated considerations, an inadequate review mechanism, and insufficient recognition of the importance of maintaining and managing accessible facilities[7].

Research has indicated that the accessibility facilities used for cultural heritage preservation should be customized and reversible. The materials and colors should align with the characteristics of the cultural heritage, and differentiation should be considered, meaning the

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5 Chang C.-Y. (2019). Analysis of the legal system of public building accessibility in Taiwan. *International Journal of Gerontology*, Special Issue, (pp. 83-87).

6 Cheng Y.-L., Wang S.-C., Zhang Z.-Y., Lee M.-H., Lo W.-T., Lee Y.-C. (2018). *Handbook of universal design applications: A retrospective review of classic examples in architectural accessibility.* New Taipei City: Architecture and Building Institute, Ministry of the Interior.

7 Liao H.-Y. (2012). Improvement of barrier-free facilities in historical and historical buildings. *Journal of the Architectural Society of Taiwan* 10, (pp. 32-40); Xuelian Real Estate Information Consultant Ltd. (2013). *Research and feasibility assessment plan*, commissioned by the Cultural Assets Bureau of the Ministry of Culture.

strictest accessibility design standards do not always need to be applied. Additionally, cultural tourism should consider the construction of accessible environments. Museum environments need to emphasize cultural accessibility and the improvement of accessible facilities. Accessible environments can be integrated into inclusive design. It is recommended to consider universal design principles, taking into account the needs of various disabled individuals, age groups, and genders during the design process. The use of environmentally friendly materials, attention to anti-slip and safety principles, and consideration of personnel management and maintenance needs are also crucial[8].

In recent years, smart technology has extended to the construction of accessible environments and begun to explore applications in the cultural heritage sector. For example, the concept of cultural inclusiveness integrates smart technology into the interaction, education, and engagement with cultural heritage. Museums can employ virtual reality interactive systems to provide visitors with unique experiences and offer guidance and interpretation of cultural heritage for visually impaired individuals. For instance, National Taiwan Museum has utilized 3D models and embossed facades to provide tactile exploration, offering special experiences for visually impaired individuals[9].

Therefore, it is evident that information and communication technology (ICT) has found extensive applications in cultural heritage. Advances in ICT have led to numerous applications in museums, including Braille guides, smart assistive devices, hearing aids, and mobile devices for the visually impaired. These innovations represent enhanced accessibility for cultural institutions and improved visitor experiences.

3. Research Methods

This study aims to reflect on the construction of barrier-free environments in Taiwan's cultural heritage preservation from the perspective of the Venice Charter and to propose relevant recommendations.

To analyze the construction of barrier-free environments in Taiwan's cultural heritage preservation, the research methods include:

(1) Analysis of Cultural Heritage Preservation Laws: Examining the legal provisions related to cultural heritage preservation.

(2) Expert Interviews: Conducting interviews with experts to gain insights into the current practices and challenges.

(3) Case Studies: Analyzing specific cases of cultural heritage sites to understand the practical implementation of barrier-free environments.

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[8] Xuelian Real Estate Information Consultant Ltd. (2013). *Research and feasibility assessment plan*, commissioned by the Cultural Assets Bureau of the Ministry of Culture.

[9] Chao C.-Y. (2018). Autonomy and equity: Practical application of accessible guided tour technology in the National Taiwan Museum of Fine Arts. *Journal of Museum and Culture* 15, (pp. 75-108).

Given the increasing role of information and communication technology (ICT) in improving barrier-free environments, particularly benefiting the visually impaired, this study specifically includes interviews with visually impaired individuals to understand their perspectives on the application of technology. Additionally, it discusses the construction of barrier-free environments when cultural heritage sites are repurposed as museums. Finally, it reflects on the significance of the Venice Charter and proposes future recommendations for the preservation and adaptive reuse of historical monuments in Taiwan.

4.Research Process and Findings

4.1 Analysis of Taiwan's Cultural Heritage Preservation Laws

In Taiwan, the Cultural Heritage Preservation Act was established in 1982. Initially, the preservation of cultural heritage followed the universal principles and values outlined in the "Venice Charter," which emphasize authenticity and integrity. The Act underscores the importance of historical characteristics, opposes the reconstruction of styles without proper basis, and mandates comprehensive documentation. However, during the restoration or adaptive reuse of monuments or historical buildings, there is a lack of attention to the improvement of barrier-free environments.

The emphasis on improving barrier-free environments in Taiwan primarily arose from the advocacy of disability rights groups in the region. These groups, with the assistance of legislators, organized public hearings and amended laws. Due to increased legislative pressure, administrative departments gradually promoted various improvements related to barrier-free environments. According to the "People with Disabilities Rights Protection Act," new public buildings and venues must plan and install facilities and equipment that facilitate the movement and use by individuals with various disabilities. Non-compliance results in the denial of building permits or the prohibition of public use[10].

Pertinent to this study is the regulation concerning existing public buildings and venues. If their barrier-free facilities and equipment do not meet the required standards, the owner or responsible management agency must make improvements and submit alternative improvement plans for approval based on specific circumstances. Violations of these regulations will incur corresponding penalties, including suspension of use, fines, and deadlines for improvements. The purpose of such legislation is to ensure that individuals with disabilities can live independently and participate in all aspects of society, thereby fulfilling the barrier-free environment emphasized by the "Convention on the Rights of Persons with Disabilities" and achieving the goal of providing conditions and opportunities comparable to those of the general population.

In terms of architecture, the primary regulations are found in the "Building Technical Regulations," specifically in the "Building Design and Construction Chapter," under "Chapter 10: Barrier-Free Buildings." This chapter stipulates the basic principles and quantity requirements for the installation of barrier-free pathways, elevators, stairs, restrooms, wheelchair-accessible seating, guest rooms, and parking spaces.

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[10] Ministry of Health and Welfare. (2021). *People with Disabilities Rights Protection Act*. Taipei, Taiwan.

For example, Article 167-1 stipulates that the entrances of living quarters and restrooms with barrier-free facilities, bathrooms, guest rooms, elevators, parking spaces, and stairs must have accessible routes. Article 167-2 mandates that of the straight staircases installed in a building, at least one must be an accessible staircase. Article 167-4 requires that buildings with communal bathrooms must have at least one accessible bathroom in each building. Article 167-6 specifies that buildings with a total of fifty or fewer legal parking spaces must have at least one accessible parking space[11].

The "Design Specifications for Barrier-Free Facilities in Buildings" (Ministry of the Interior,2020) provides basic design guidelines for various barrier-free facilities and equipment. Additionally, the "Procedures and Principles for Alternative Barrier-Free Facilities in Existing Public Buildings"[12] promotes flexible improvements to the barrier-free facilities in existing buildings.

However, in Taiwan, the primary legislation governing the management of cultural heritage is the Cultural Heritage Preservation Act. However, this act lacks provisions regarding the accessibility of the environment.

Taiwan's cultural heritage regulations stipulate that historical monuments should either preserve their original appearance and construction methods or be repurposed according to specific guidelines.

Analyzing Article 24 of the Cultural Heritage Preservation Act, it stipulates that historical monuments must retain their original appearance and construction techniques. In cases of damage, if the main structure and materials are still intact, restoration should prioritize preserving the cultural heritage value and adhere to the original appearance. Owners, users, or managers may submit a plan for appropriate restoration or adaptive reuse, which must be approved by the competent authority. Restoration plans may incorporate modern technology and methods when necessary to enhance features such as seismic resistance, disaster prevention, moisture protection, pest control, and longevity. Adaptive reuse plans may include the addition of necessary facilities, provided they do not alter the original appearance of the monument.

The so-called "Reuse Plan" referred to above, according to Article 3 of the "Regulations on the Restoration and Reuse of Monuments"[13], should include the evaluation of the value of cultural assets and the suitability for reuse, the formulation of principles, the review and recommendations concerning building, land, fire protection, and other relevant laws and regulations, the suggestions for the formulation of response plans, as well as recommendations for necessary facility systems and operational management.

Analyzing Article 23 of the "Cultural Heritage Preservation Act," the regulations stipulate that the management and maintenance of monuments include daily upkeep and regular repairs, operational management for use or reuse, theft prevention, disaster prevention, insurance, and the formulation of emergency response plans[14].

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[11] Ministry of the Interior. (2021a). *Chapter 10 accessible buildings in the building design and construction section of building technical regulations.* Taipei, Taiwan.

[12] Ministry of the Interior. (2021b). *The operation directions of submitting alternative improvement plans for the access-free facilities in the existing public buildings.* Taipei, Taiwan.

[13] Ministry of Culture. (2019). *Monuments restoration and reuse regulations.* Taipei, Taiwan.

[14] *Ibidem*.

Analyzing Article 8 of the "Cultural Heritage Preservation Act," the regulations stipulate that the use or reuse of monuments should prioritize purposes that are original or related and compatible with the original use. If the use of a monument changes from its original purpose, involving internal modifications or the addition of auxiliary facilities, the owner, user, or manager must follow the relevant provisions of the "Regulations on the Restoration and Reuse of Monuments"[15].

Article 10 stipulates that if a monument is used by the public and involves commercial activities, the owner, user, or manager must establish an operational management plan and include it in the management and maintenance plan[16].

Article 18 stipulates that the owner, user, or manager of a monument must carry out management and maintenance work according to the management and maintenance plan[17].

Therefore, the current provisions of Taiwan's Cultural Heritage Preservation Act do not specifically address the establishment of barrier-free environments for cultural assets. Although the Act stipulates that architectural cultural assets should establish comprehensive reuse case records and retain their original appearance and construction methods, it permits the addition of necessary facilities in reuse plans without altering the original appearance. However, these regulations do not emphasize the construction of barrier-free environments, nor do they provide specific guidelines for improving such environments. Consequently, improvements to the barrier-free environments of architectural cultural assets typically reference the design standards of general building regulations for barrier-free environments, with adjustments made based on the characteristics of the individual cultural asset being reused.

4.2 Interview Analysis

For general accessibility equipment applied to architectural cultural assets, there has been extensive research in the past. However, what challenges arise from the utilization of information and communication technology (ICT) facilities in architectural cultural assets for individuals with disabilities?

This study conducted interviews with both experts in the field and individuals with disabilities. The primary objective was to acquire insights into current pertinent regulations, prevailing challenges, and prospective avenues for improvement. The interviews aimed to understand the practical issues faced in integrating ICT with cultural heritage sites and to identify solutions that enhance accessibility and user experience for individuals with disabilities. (Tab.1)

15 *Ibidem.*
16 *Ibidem.*
17 *Ibidem.*

Tab. 1 List of Experts and Interviewees in this Study with Assigned Codes
Data Source: Compiled from this study

Code	Title	Reason for Selection
A	Professor	Possesses research experience in the application of information and communication technology in spatial environments.
B	Visually Impaired	Visually impaired individual who uses information and communication devices.
C	Visually Impaired Teacher	Visually impaired individual who is also a teacher and utilizes information and communication devices.
D	Visually Impaired Teacher	Visually impaired individual who is also a teacher and utilizes information and communication devices.
E	Director of Early Intervention Association for Developmentally Delayed Children	Engaged in research and practical work related to aids for the elderly, with exposure to visually and hearing impaired individuals.
F	Visually Impaired Student	Visually impaired individual who uses information and communication devices.

Main Issues Include the Following Topics:

(1) Problems Faced by Visually Impaired Individuals Using ICT Systems

(2) Recommendations for Applying ICT

(3) Suggested Locations for Application

4.2.1. Problems Faced by Visually Impaired Individuals Using ICT Systems

In Taiwan, one reason ICT is not easily accessible is the lack of participation from individuals with disabilities in product design. For example, the development of the mobile postal app did not involve visually impaired users, resulting in practical usage issues (B). It is crucial to incorporate universal design and service-end design thinking, and to avoid relying solely on ICT for navigation. Attention should also be paid to tech equality, universal design, and service-end design (B).

Visually impaired users face issues such as information gaps and privacy concerns when using ICT devices. In public buildings, the application of ICT in barrier-free facilities primarily involves issues of information accessibility, digital divide, and information disclosure. While ICT can help disabled individuals overcome physical barriers, the main issues revolve around personal privacy, such as location tracking, communication dissemination, and the risk of fraud, leading to a digital divide (A).

Visually impaired individuals also struggle with spatial cognition. For them, being able to touch a map and being able to navigate a space are two separate challenges (B).

4.2.2. Recommendations for Applying ICT

Future applications of ICT in barrier-free environments should adopt supplemental solutions that optimize existing facilities. Barrier-free information networks can be integrated into public buildings, but attention must be paid to tech equality. The application of ICT in barrier-free facilities should not replace improvements but should be treated as a means to optimize or supplement existing solutions, promoting the "Access for All" concept (A).

ICT equipment provided to disabled individuals should be functionally simple and have easy-to-use interfaces (F). These devices should also be integrated with general consumer products to reduce specificity. The government should encourage the development of assistive devices that can integrate with general products, considering commercialization from the early stages of research to reduce uniqueness (D).

Additionally, the adaptability of smart technology should be considered. For example, smartphones can use MP3 files to provide Braille information and audio guides, which means only the audio files need to be updated in the future, rather than changing QR codes (C).

4.2.3. Suggested Locations for Application

In indoor guided spaces, using ICT such as QR codes, guide machines, and electronic information screens is very effective. For example, museums using QR codes serve as a good model (A), and the guide machines at the National Palace Museum are also commendable (F). Furthermore, museums and art galleries can increase the use of electronic information screens (E).

4.3 Case Study of Museums

The improvement of accessible environments in cultural heritage sites is closely related to the concepts of cultural equality, affirmation of cultural diversity among various groups, and the avoidance of discrimination and prejudice in all forms.

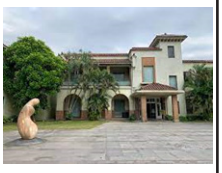
The term "cultural equality" refers to the idea that individuals from different cultural backgrounds should have equal opportunities to participate in and enjoy cultural heritage. "Affirmation of cultural diversity among various groups" means that the cultural differences of diverse groups, including those of different ages, genders, abilities, and backgrounds, should be respected and affirmed. "Avoidance of discrimination and prejudice" signifies that everyone should be treated fairly, regardless of their physical condition or cultural background.

Current legislation should ensure the establishment of accessible facilities while protecting cultural heritage, enabling individuals with disabilities to visit and utilize cultural heritage sites on an equal basis.

This study collected data from important museums in Taiwan and found that as functional spaces, museums and exhibition halls consider the needs of different users and service facilities. The primary considerations include the exterior route, indoor entrance hall, parking lot, and accessibility signs. The service facilities taken into account include service desks, water dispensers, wheelchairs, baby stroller rentals, baby stroller parking areas, dining spaces, wheelchair-

accessible entrances and exits for ticket inspection, sunshade and rain shelter rest areas, resting seats, and nursing rooms. (Tab. 2)

Tab. 2 The reuse of Taipei City's historic monuments is set up as a barrier-free facility for the museum
Source: Department of Cultural Affairs, Taipei City Government, Retrieved from, https://culture.gov.taipei/Content_List.aspx?n=A2EF58B1202D59DE(2024/6/1)

Case	Disabled Facilities and Equipment	Provide aids or services for the hearing impaired	Provide aids or services for the visually impaired	Service Area
Beitou Hot Spring Museum 	Exterior route, Indoor entrance hall, Parking Lot, Accessibility signs.		Audio guide service	Service desk, medical station, locker, water dispenser, doll car parking area, sunshade and rain shelter rest area, rest seat, parking waiting space, nursing room
Sun Yun-Suan Memorial Museum 	Exterior route, Indoor entrance hall, Elevator, Toilet, Parking Lot, Accessibility signs.	Fire flash warning light		Information desk, water dispenser, wheelchair, dining space, entrance and exit for wheelchair check, nursing room
Taipei 228 Memorial Museum 	Exterior route, Indoor entrance hall, Elevator, Toilet, Accessibility signs.	Fire flash warning light	Audio guide service	Service desk, water dispenser, wheelchair, baby car rental, baby car parking area, dining space, entrance and exit for wheelchair ticket inspection, sunshade and rain shelter rest area, rest seats, nursing room

This study analyzes the example of the National Taiwan Museum, which consists of the Main Building, the Paleontology Museum, the Nanmen Branch, and the Railway Department Park. The primary barrier-free facilities provided for individuals with visual, hearing, and intellectual disabilities include:

(1) Free Admission: Persons with disabilities and their companions can receive one free ticket upon presenting valid identification.

(2) Accessible Elevators.

(3) Accessible Entrances.

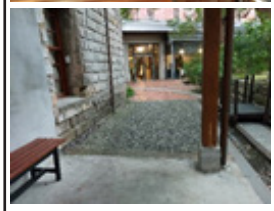
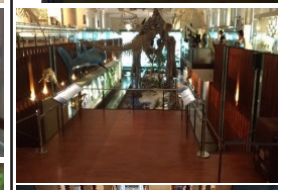
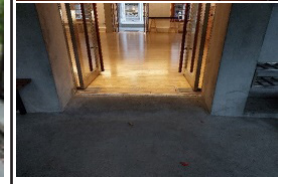
(4) Accessible Parking Spaces.

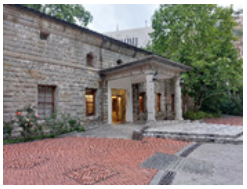
(5) Convenient Services: These include EasyCard ticket purchasing, wheelchair and baby stroller rentals, free drinking water, and dining services.

On-site investigations reveal that the museum's unique features focus on maintaining flat and non-slip accessible pathways, with gentle ramps and anti-slip strips. Transparent accessible elevators are installed to preserve the historical appearance of the buildings. Accessible signs are specially designed, and the museum's permanent exhibitions provide audio guide services for the visually impaired and Braille guidebooks. Sign language guide videos are available for the hearing impaired, and wheelchair rental services are provided for those with physical disabilities (Tab. 3).

However, in terms of improving the accessibility environment, the installation of facilities and equipment—such as accessibility signage, elevators, restrooms, and directional indicators for accessible pathways—will be carried out under the premise of not altering the original structure and construction methods of the building or ensuring a clear distinction from the existing architectural framework. These improvements will be implemented as additions to enhance both software and hardware facilities.

Tab. 3 The main barrier-free facilities in National Taiwan Museum)
Source: Photographed by the author. Accessibility zone website of National Taiwan Museum is retrieved from https://accessibility.moc.gov.tw/NTM/content?v=2#tab-7 (2023/3/14)

Museum	Main Facility	Picture	
The Main Museum 	Accessibility passage	  	  

<table>
<tr>
<td rowspan="5">The Paleontology Museum
 
The South Gate Museum
 
The Ministry of Railways Park
  </td>
<td>Accessible restroom</td>
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<td>Accessible elevator</td>
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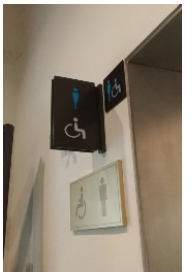
<td>Accessibility signs</td>
<td>  
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<td>Audio Guide Service</td>
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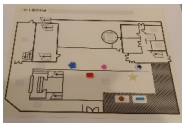
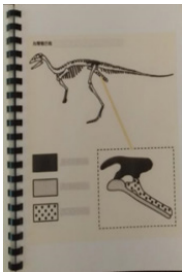
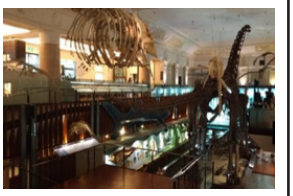
<td>  
   </td>
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	Accessibility Zone Website		

5.Conclusion

This paper discusses the relationship between the Cultural Heritage Preservation Act and barrier-free environments through the analysis of Taiwan's cultural heritage preservation laws, interviews, and case studies. The "Venice Charter" emphasizes restoration and preservation, stating that added facilities and equipment should not damage existing parts. While Taiwan's Cultural Heritage Preservation Act has relevant provisions, it lacks specific regulations for improving barrier-free environments. Typically, the design standards for improving barrier-free environments in general buildings are referenced and then adjusted according to the characteristics of the individual cultural asset being reused.

However, when considering the reuse of cultural assets, especially in museums or exhibition spaces, it is essential to provide "equitable service" to all users. In "equitable service," constructing barrier-free access within the cultural heritage environment is the most important and fundamental aspect. When considering the reuse of cultural assets, it is crucial to ensure that visually impaired, hearing impaired, and physically disabled individuals receive equitable service, offering more flexible alternative improvement methods. However, any proposal for improving accessibility must adhere to the principle of prioritizing the preservation of cultural heritage values and should not alter the original appearance or traditional construction methods of the heritage site.

Bibliography

Chang C.-Y. (2019). Analysis of the legal system of public building accessibility in Taiwan. *International Journal of Gerontology*, Special Issue, (pp. 83-87).

Chao C.-Y. (2018). Autonomy and equity: Practical application of accessible guided tour technology in the National Taiwan Museum of Fine Arts. *Journal of Museum and Culture* 15, (pp. 75-108).

Cheng Y.-L., Wang S.-C., Zhang Z.-Y., Lee M.-H., Lo W.-T., Lee Y.-C. (2018). *Handbook of universal design applications: A retrospective review of classic examples in architectural accessibility.* New Taipei City: Architecture and Building Institute, Ministry of the Interior.

Department of Cultural Affairs, Taipei City Government. (2024). Retrieved from https://culture.gov.taipei/Default.aspx (2024/6/1).

Ender C., Jokilehto J., Lemaire R., Silva R. (1994). *The Venice Charter 1964-1994*, France, Paris: ICOMOS.

D'Agostino G., Boido C. (2022). Technological artifices: Good practices for inclusive communication in museums. *Ochrona Dziedzictwa Kulturowego* 13, (pp. 26-36).

Liao H.-Y. (2012). Improvement of barrier-free facilities in historical and historical buildings. *Journal of the Architectural Society of Taiwan* 10, (pp. 32-40).

Martínez Yáñez C. (2022). ICOMOS International Cultural Tourism Charters 1976-2021: Evolution, contributions and trends in cultural heritage protection. *Ochrona Dziedzictwa Kulturowego* 14, (pp. 34-46).

Ministry of Culture. (2019). *Monuments restoration and reuse regulations.* Taipei, Taiwan.

Ministry of Culture. (2023). *Cultural Heritage Preservation Act.* Taipei, Taiwan.

Ministry of Culture. (2024). *Accessibility zone website of National Taiwan Museum.* Retrieved from https://accessibility.moc.gov.tw/ (2024/7/10).

Marconcini S. (2022). Inclusive design strategies for museums. Targets and remarks for wider access to culture. *Ochrona Dziedzictwa Kulturowego* 14, (pp. 24-31).

Ministry of Health and Welfare. (2021). *People with Disabilities Rights Protection Act.* Taipei, Taiwan.

Ministry of the Interior. (2021a). *Chapter 10 accessible buildings in the building design and construction section of building technical regulations.* Taipei, Taiwan.

Ministry of the Interior. (2021b). *The operation directions of submitting alternative improvement plans for the access-free facilities in the existing public buildings.* Taipei, Taiwan.

Ministry of the Interior. (2020). *Design specifications of accessible and usable buildings and facilities.*Taipei, Taiwan.

Ministry of the Interior. (2016). *Public building accessible facility inspection operation guidelines.* Taipei, Taiwan.

United Nations. (2014). *Convention on the Rights of Persons with Disabilities – Articles*. Herndon, US: United Nations Publications.

Xuelian Real Estate Information Consultant Ltd. (2013). *Research and feasibility assessment plan*, commissioned by the Cultural Assets Bureau of the Ministry of Culture.

Yan L.-Y. (2005). Globalization--A critical review of historic preservation theories. *Journal of Geographical Science* 42, (pp. 1-24).