



## ETHNIC AND HISTORICAL IMPORTANCE IN MODERN LANDSCAPE DESIGN: CONSERVING HERITAGE IN CONTEMPORANEOUS ENVIRONMENTS

<sup>1</sup>HUANG YINGYING, <sup>2</sup>Muralitharan Doraisamy Pillai

### Abstract

Due to the city's geographical and chronological history, the historic urban countryside has heritage value as a remnant of the shift from the urban borders to the natural environment. The increasing conflicts between urban development and cultural landscape preservation, brought forth by periodic social upheavals, are sadly eroding their cultural landscape heritage. This study takes a look at the Sheshan Urban Countryside Historic District in Shanghai and uses the layers of history to categorise the cultural landscape's epochs: Emergence, Development and Exploration, Diversity and Prosperity, Turbulence and Change, and Stability and Precipitation. The purpose of this research is to determine the qualities and values of the cultural landscape heritage layers of Sheshan by examining their evolution via the application of Historic Urban Landscape Historic Land use Assessment (HUL) and Historical Landscape Assessment (HLA). Accretion, juxtaposition, overlay, and decline are the four separate stratigraphic relationships identified in the cultural landscape legacy of Jiufeng Sheshan, as per the study. According to these findings, the continual occurrence of different stratigraphic patterns seems to represent an evolutionary feature. Also, the legacy value of Jiufeng Sheshan's cultural landscape stratum has been growing at a quicker pace in recent times. Modern scientific and religious buildings are more likely to survive than literati gardens and Buddhist relics. In view of the cultural landscape heritage's understanding and appraisal of its worth, living preservation and restoration of landscape heritage must be addressed. This calls for the development of a strategy to restore and protect cultural landscape heritage, one that follows the idea of historical stratification and unites the scattered cultural artefacts. Organic revitalisation of urban and rural areas, as well as the transmission and protection of cultural landscape assets in historic districts of both urban and rural areas, may be guided by this study.

**Keywords:** *Heritage landscapes, culture, environmentally friendly growth, landscaping design.*

### Introduction

Various government and nonprofit organisations support the intricate concept of "cultural landscapes." All aspects of the natural world, as well as human interpretations and modifications to it, are included in this statement. Cultural landscapes are not only great places to visit, but they may also provide the groundwork for environmentally responsible land management strategies. Urban planners have begun to focus less on specific cities and more on whole regions as a result of researchers' change in understanding legacy from discrete symbols to larger landscapes. As issues of location, cultural landscapes are intrinsic to city planning. By developing comprehensive plans that document the cultural landscape's evolution and human usage, regional initiatives may pave the way for governmental acknowledgement and public engagement. These regional plans provide a sustainable model by acknowledging history as a social and economic resource. Implementing the concept has two purposes: first, to protect the cherished heritage; and second, to promote economic activities including investment, commerce, and tourism. Additionally, they provide a strategy for growth in the future. Heritage landscapes have the potential to become economic engines and the backbone of revitalisation projects in their respective regions if they are designed with the idea of ongoing adaptation and future growth in mind. Sustainable and long-term benefit to the local community is the holy



grail of environmental stewardship. Sustainable urban development on a regional level might be significantly influenced by cultural landscapes. The authors provide some recommendations for the development and maintenance of cultural landscapes and historical parks after surveying examples from throughout the globe. They are not aiming to give a systematic model, but rather a framework for comprehending the interconnected nature of heritage and development, regeneration and preservation, planning and protection (Yang, 2020).

### **Background of the study**

Landscape architects expertly blend natural and man-made features to create spaces that are aesthetically pleasing and functionally sound. The principles of modern landscape architecture centre on people, their needs, and the environment, with an emphasis on technical advancement and environmental protection. The value of landscapes in preserving place and history as repositories of cultural and historical tales is frequently overlooked in this march towards modernity. The topography of a community may tell us a lot about its culture, religion, and social structure. Whether it is a garden, a sacred place, or an urban park, traditional landscape designs are able to capture the spirit of the people who lived there in the past. According to, these magnificent locations served as sites for major social gatherings, government functions, and festivities. The quickening pace of urbanisation, the expansion of technology, and the expansion of global trade are a few of the causes that sparked the modern movement of landscape architecture. Due to their uniform positions, these inventions may have lost some of their cultural and historical significance, even if they brought out new materials and processes. The potential for contemporary landscapes to become disconnected from their past and the people who formerly lived there is a big cause for worry. Research on how to integrate cultural and historical aspects into modern landscape architecture is crucial. Modern society's needs and the cultural narratives of a place must be carefully considered by designers who are serious about incorporating a location's past into contemporary environments. The first stage is to protect historic sites. Finding ways to include cultural and historical elements is the goal of this study for modern landscape architects. Their sense of belonging and pride in their ancestry will grow as a consequence. Through the examination of case studies, design principles, and the importance of community interaction, this program seeks to provide solutions that integrate innovation with the preservation of historical landscapes (Chen & Luo, 2021).

### **Purpose of the research**

"Cultural and Historical Significance in Contemporary Landscape Design: Preserving Heritage in Modern Landscapes" seeks to investigate new ways in which modern landscapes might include and protect cultural and historical features. Finding ways to keep cultural artefacts safe from the effects of urbanisation is one of the primary goals. Among other things, The researchers want to learn how traditional landscapes contribute to local identities and find ways to design that take into account both contemporary and historical factors. The research aims to accomplish three things: first, to become more conservation-conscious in general and among professionals in particular; second, to show how heritage can be successfully integrated into modern landscapes; and third, to emphasise the long-term benefits of preserving historical artefacts, like better cultural understanding and social cohesion. The overarching goal of the research is to show how modern landscape architecture can pay homage to the past while also catering to the needs of the present and future.

### **Literature review**

Looking at how contemporary landscape architects and designers incorporate cultural and historical aspects into their work, "Cultural and Historical Significance in Contemporary Landscape Design: Preserving Heritage in Modern Landscapes" delves into a number of



important subjects. Cultural landscape theory and other theoretical frameworks hold that landscapes reflect the ideas, values, and social mores of the people who created them, going beyond being just physical sites. The substantial symbolic value of landscapes in relation to human history and identity has been highlighted by historians like Christopher Tilley and Carl O. Sauer. According to Pecci and Campanile (2020), the Venice Charter states that historic landscapes should be preserved via adaptive reuse. Renowned landscape architects James Corner and Richard Haigh are investigating the possibility of combining modern design elements with those from the past. If academics are serious about meeting modern demands without compromising cultural relevance, they must study adaptive reuse, which is defined as finding new applications for ancient buildings or pieces. Timothy Beatley and Stephen Wheeler have written extensively on the topics of green infrastructure, ecological restoration, conventional construction materials, eco-friendly design, and historic preservation in their publications. Research on the best practices for public spaces that balance historical preservation with modern amenities sometimes draws inspiration from actual restoration efforts, such as the historic gardens of Versailles or Central Park in New York City. Authors such as Ash Amin and Nigel Thrift have brought attention to the risks of fast urbanisation and globalisation, especially in relation to cultural homogeneity and the erosion of regional identity (Hu & Lin, 2020). Scholars such as Sherry Arnstein have brought attention to the significance of participatory design methods in landscape architecture. Incorporating locals into the process of cultural preservation is the goal of these techniques. This highlights the significance of community involvement in landscape design. A lot of individuals believe that the best way to preserve historic landscapes for the long run is to educate the public about the past and include them in policymaking. The research suggests that future landscape designs should take a more holistic approach. In light of this, it is imperative that modern development include cultural preservation strategies that honour and expand upon the historical backgrounds of landscapes. People will feel more connected to their past and the environment at these locations, which nonetheless meet current needs (Angelin et al., 2021).

### **Research question**

What is the impact of Narrative and Storytelling on the preserving of heritage in modern landscapes?

### **Research methodology**

#### **Research design:**

Quantitative data were examined with SPSS version 25. The direction and magnitude of the statistical link were assessed using the odds ratio and the 95% confidence interval. Researchers determined a statistically significant criterion at  $p < 0.05$ . A descriptive analysis was used to ascertain the primary components of the data. Data obtained by surveys, polls, and questionnaires, or by altering existing statistical data using computational tools, is often evaluated mathematically, numerically, or statistically employing quantitative approaches.

**Sampling:** After a first research with 20 Chinese academicians, the final batch of investors included 1,400 Rao-soft students. Researchers of both genders were randomly chosen and given a total of 1,660 questionnaires to complete. A total of 1,536 questionnaires were analysed after receiving 1,610, with 74 discarded due to incompleteness.

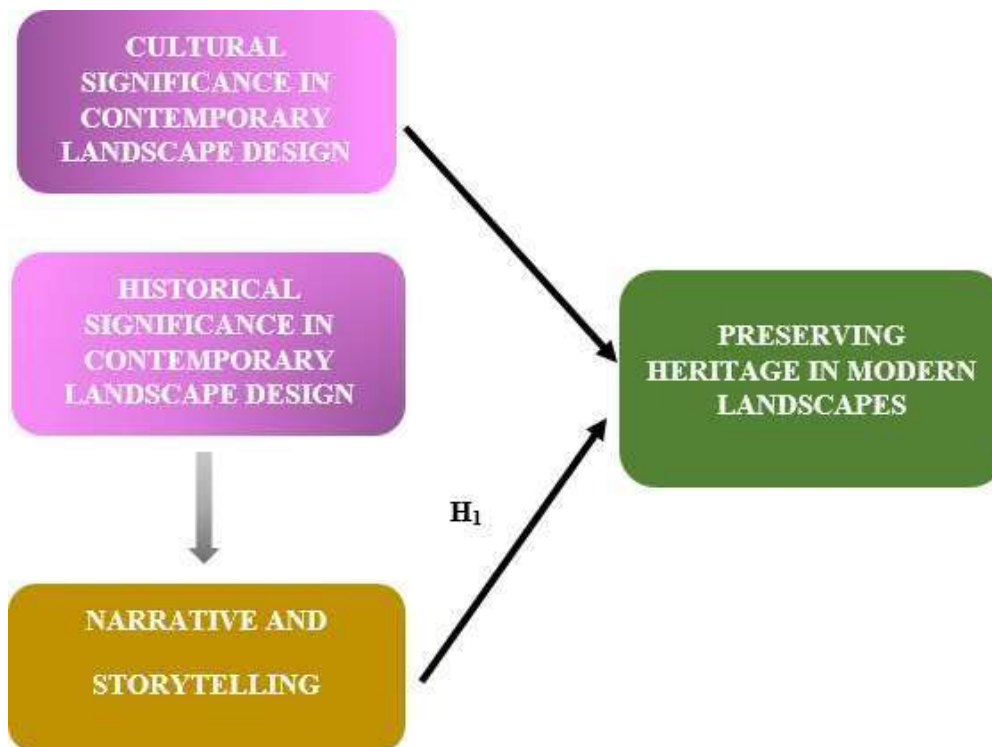
**Data and Measurement:** The primary instrument for data collection in the research was a questionnaire survey. Part A of the survey solicited fundamental demographic data, whilst Part B required participants to evaluate several facets of online and offline channels using a 5-point Likert scale. Secondary data was collected from many sources, mostly focussing on internet databases.



**Statistical Software:** The statistical analysis was conducted using SPSS 25 and MS-Excel.

**Statistical Tools:** To grasp the fundamental character of the data, descriptive analysis was used. The researcher is required to analyse the data using ANOVA.

### Conceptual framework



### Results

- **Factor Analysis**

A common use of Factor Analysis (FA) is to ascertain the presence of latent variables within observable data. In the absence of readily discernible visual or diagnostic indicators, it is customary to use regression coefficients to provide ratings. In FA, models are crucial for success. The objectives of modelling are to identify errors, intrusions, and evident correlations. The Kaiser-Meyer-Olkin (KMO) Test is a method for evaluating datasets generated by multiple regression investigations. They confirm that the model and sample variables are representative. The data exhibits duplication, as shown by the figures. When the proportions are reduced, the data becomes more comprehensible. The KMO output is a numerical value ranging from zero to one. If the KMO value ranges from 0.8 to 1, the sample size is deemed sufficient. These are the allowable limits, as per Kaiser: The subsequent approval requirements established by Kaiser are as follows:

A pitiful 0.050 to 0.059, below average 0.60 to 0.69

Middle grades often fall within the range of 0.70-0.79.

With a quality point score ranging from 0.80 to 0.89.

They marvel at the range of 0.90 to 1.00.

Table1: KMO and Bartlett's Test



Testing for KMO and Bartlett's

Sampling Adequacy Measured by Kaiser-Meyer-Olkin .940

The results of Bartlett's test of sphericity are as follows: approx. chi-square

df=190

sig.=.000

This establishes the validity of assertions made only for the purpose of sampling. To ensure the relevance of the correlation matrices, researchers used Bartlett's Test of Sphericity. Kaiser-Meyer-Olkin states that a result of 0.940 indicates that the sample is adequate. The p-value is 0.00, as per Bartlett's sphericity test. A favourable result from Bartlett's sphericity test indicates that the correlation matrix is not an identity matrix.

**Table: KMO and Bartlett's**

<b>KMO and Bartlett's Test</b>		
<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		.940
<b>Bartlett's Test of Sphericity</b>	<b>Approx. Chi-Square</b>	3252.968
	<b>df</b>	190
	<b>Sig.</b>	.000

Bartlett's Test of Sphericity further substantiated the overall significance of the correlation matrices. The Kaiser-Meyer-Olkin metric of sample adequacy is 0.940. The researchers calculated a p-value of 0.00 using Bartlett's sphericity test. The correlation matrix was rendered invalid by a significant outcome from Bartlett's sphericity test.

#### ❖ INDEPENDENT VARIABLE

- **Historical significance in contemporary landscape design:**

Modern landscape architects use the term "historical significance" to describe the process of incorporating or acknowledging past landscape elements, events, or cultural practices into modern designs. It comprises creating spaces that are aesthetically beautiful and practical, honouring the past while meeting the needs and wants of the present. This includes things like sticking to tried-and-true construction methods, preserving existing historical sites, and incorporating architectural ideas that pay homage to bygone periods and the cultural importance of those times. Historical sites are often used into contemporary landscape design to enrich the narrative of a place, giving it a sense of continuity, identity, and connection to the past while simultaneously developing spaces that are suitable for and beneficial to people in the present. By finding a happy medium, landscape architects can create environments that both celebrate and inspire change (Sandak et al., 2021).



## ❖ FACTOR

### • Narrative and Storytelling

Heritage landscapes are areas where cultural and natural aspects have coexisted for an extended enough duration to create a unique and perhaps protected phenomenon. In 2014, both contemporary nations and the International Union for the Conservation of Nature (IUCN) took note of these areas. Preserving buildings, landscapes, artefacts, and other culturally or historically important objects is the goal of historic preservation in the UK. This practice goes by a variety of names, including built heritage preservation, historic preservation, and built heritage conservation. Maintaining natural habitats may mitigate some of the negative effects of human activity. Forest conservation projects often use sustainable logging practices to lessen the probability of deforestation. Reserving a portion of a forest for future human habitation is what it means to conserve a forest. Over the last several decades, protecting The researchers nation's diminishing natural resources has been a top priority. Scientists now recognise the significance of transferring various forms of water, land, air, and biological organisms. The recent United Nations conference in Johannesburg and the Kyoto Protocol both show how severe the situation has grown on a worldwide basis. Fundamental to these endeavours is the preservation of Earth and all life on it. Careless destruction and very rapid change are two of the challenges they must overcome (Bouvier et al., 2022).

## ❖ DEPENDENT VARIABLE

### • Preserving Heritage In Modern Landscapes:

Heritage landscapes are areas where cultural and natural aspects have coexisted for an extended enough duration to create a unique and perhaps protected phenomenon. In 2014, both contemporary nations and the International Union for the Conservation of Nature (IUCN) took note of these areas. Preserving buildings, landscapes, artefacts, and other culturally or historically important objects is the goal of historic preservation in the UK. This practice goes by a variety of names, including built heritage preservation, historic preservation, and built heritage conservation. Maintaining natural habitats may mitigate some of the negative effects of human activity. Forest conservation projects often use sustainable logging practices to lessen the probability of deforestation. Reserving a portion of a forest for future human habitation is what it means to conserve a forest. Over the last several decades, protecting The researchers nation's diminishing natural resources has been a top priority. Scientists now recognise the significance of transferring various forms of water, land, air, and biological organisms. The recent United Nations conference in Johannesburg and the Kyoto Protocol both show how severe the situation has grown on a worldwide basis. Fundamental to these endeavours is the preservation of Earth and all life on it. Careless destruction and very rapid change are two of the challenges they must overcome (Kot et al., 2020).

### • Relationship between Narrative and Storytelling and Preserving Heritage In Modern Landscapes

To design contemporary landscapes that are culturally and historically significant while still being aesthetically pleasing, it is necessary to consider the connection between storytelling, narrative, and heritage preservation. Through the use of form, materiality, and spatial organisation, landscape architects communicate stories about a site's past, present, and future. Designers may both honour a site's history and make it relevant to modern viewers by incorporating these narratives into the environment. The preservation of historical elements, symbolic plants, design patterns, and interpretative signs are all ways that these stories might be told. People become more connected to the places they live via the act of storytelling,



which also helps to preserve cultural memory. Integrating cultural and historical tales into contemporary landscapes helps preserve a place's identity while also preserving and celebrating its legacy. A feeling of continuity and belonging is created for present and future generations via narrative, which transforms contemporary landscapes into a living testimony to the past (Azadi et al., 2020).

Consequent to the above debate, the researcher posited the following hypothesis: to examine the correlation between Narrative and Storytelling and the Preservation of Heritage in Contemporary Landscapes.

***"H<sub>0</sub>: There is no significant relationship between Narrative and Storytelling and Preserving Heritage in Modern Landscapes."***

***"H<sub>1</sub>: There is a significant relationship between Narrative and Storytelling and Preserving Heritage in Modern Landscapes."***

Table 2: H<sub>1</sub> ANOVA Test

ANOVA					
Sum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39588.620	583	5631.514	1057.164	.000
Within Groups	492.770	952	5.327		
Total	40081.390	1535			

The results of this investigation will be substantial. The F statistic is 1057.164, attaining significance with a p-value of 0.000, which is below the 0.05 alpha threshold. This indicates that the hypothesis ***"H<sub>1</sub>: There is a significant relationship between Narrative and Storytelling and Preserving Heritage in Modern Landscapes"*** is accepted, while the null hypothesis is rejected.

## Discussion

The interconnections among rural life, agricultural systems, and physical geography have made cultural landscapes, an everlasting part of human history, a popular subject in rural studies. Cultural landscapes have recently come to the forefront due to globalisation and the concept of sustainable development. Cultural landscapes hold important historical information, and communities should do their best to protect them. Because of their adaptability, cultural landscapes are crucial to heritage because they may be studied, evaluated, documented, and used to revive traditions. In addition to potentially benefiting individuals, groups, nations, and transnational communities, they have the potential to increase understanding, enhance tourism content, and aid in the formation and consolidation of social identities.

## Conclusion

Among the many "treatment options" for cultural property, preservation often entails limiting disturbance to the object's original condition while maintaining its integrity. The current landscape's form and contents are preserved. Modifications of varying sizes are possible in



well-executed restoration projects, providing modern conveniences without sacrificing important historic features or materials. The end goal of any restoration or rebuilding project should be to return a building or its components to their original state, as described in exhaustive historical records. Due to the high degree of involvement needed, the last two therapies often need the most thorough documentation. As a consequence of shifting perspectives brought about by environmental changes and urbanisation, local identities have been lost, cultural landscapes have been destroyed, and rural sustainability has been affected. Cultural identity, which includes not only social norms and behaviours but also communal family structures and practices, social conceptions, and institutional roles, was also shown to be associated with cultural landscape markers. Since this changed the local inhabitants' cultural and physical surroundings, it affected the reaction process. So, it's crucial to think about how people's cultural landscape perceptions impact physical landscape changes while creating or maintaining any given place.

## REFERENCES

1. Yang, Q. The cultural heritage landscape management and practice based on “social value”: Taking port arthur historic site as an example. *Archit. Cult.* 2020, 146–147.
  2. Chen, X.; Luo, K. Research on the contemporary ecological value of the revival of agricultural cultural heritage: Taking the compound planting and breeding system of Huayuanzi Lagongmi in Hunan as an example. *Guizhou Soc. Sci.* 2021, 9.
  3. Hu, Z.; Lin, J. New ideas for the inheritance and protection of Tibet’s intangible cultural heritage under the vision of building a strong consciousness of the Chinese national community. *J. Tibet Univ. (Soc. Sci.)* 2020, 35, 7.
  4. Angelin, E.M.; de Sá, S.F.; Soares, I.; Callapez, M.E.; Ferreira, J.L.; Melo, M.J.; Bacci, M.; Picollo, M. Application of Infrared Reflectance Spectroscopy on Plastics in Cultural Heritage Collections: A Comparative Assessment of Two Portable Mid-Fourier Transform Infrared Reflection Devices. *Appl. Spectrosc.* 2021, 75, 818–833.
  5. Sandak, J.; Sandak, A.; Legan, L.; Retko, K.; Kavčič, M.; Kosel, J.; Poohphajai, F.; Diaz, R.H.; Ponnuchamy, V.; Sajinčič, N.; et al. Nondestructive Evaluation of Heritage Object Coatings with Four Hyperspectral Imaging Systems. *Coatings* 2021, 11, 244.
  6. Bouvier, C.; Van Nuffel, S.; Walter, P.; Brunelle, A. Time-of-flight secondary ion mass spectrometry imaging in cultural heritage: A focus on old paintings. *J. Mass Spectrom.* 2022, 57, e4803.
  7. Kot, P.; Markiewicz, J.; Muradov, M.; Lapinski, S.; Shaw, A.; Zawieska, D.; Tobiasz, A.; Al-Shamma’a, A. Combination of the Photogrammetric and Microwave Remote Sensing for Cultural Heritage Documentation and Preservation—Preliminary Results. *Int. Arch. Photogramm. Remote Sens. Spat. Inf. Sci.* 2020, XLIII-B2-2020, 1409–1413.
  8. Azadi, N.; Parsimehr, H.; Ershad-Langroudi, A. Cultural heritage protection via hybrid nanocomposite coating. *Plast. Rubber Compos.* 2020, 49, 414–424.
  9. Pecci, A.; Campanile, I. “The Chiesa della Madonna dei Mali (Ferrandina, Italy) in VR”: Virtual Reality for inaccessible cultural heritage in peripheral areas. *IOP Conf. Series. Mater. Sci. Eng.* 2020, 949, 12080.
- Besoain, F.; González-Ortega, J.; Gallardo, I. An Evaluation of the Effects of a Virtual Museum on Users’ Attitudes towards Cultural Heritage. *Appl. Sci.* 2022, 12, 1341.