



CULTURAL AND HISTORICAL SIGNIFICANCE IN CONTEMPORARY LANDSCAPE DESIGN: PRESERVING HERITAGE IN MODERN SETTINGS

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Abstract

The old urban countryside is a culturally significant remnant of the city's geographical and temporal past, serving as a link between the manmade and natural worlds. Regrettably, the persistent social revolutions have led to increasing conflicts between the construction of cities and the preservation of cultural landscapes, which is causing their cultural landscape heritage to deteriorate. According to the layers of history, this study distinguishes the cultural landscape's epochs—Emergence, Development and Exploration, Diversity and Prosperity, Turbulence and Change, and Stability and Precipitation—throughout Shanghai's Sheshan Urban Countryside Historic District. Using Historic Urban Landscape Historic Land use Assessment (HUL) and Historical Landscape Assessment (HLA), this research aims to establish the qualities and values of Sheshan's cultural landscape heritage layers by examining their evolution. Accretion, juxtaposition, overlay, and decline are the four separate stratigraphic relationships identified in the cultural landscape legacy of Jiufeng Sheshan, as per the study. These findings provide further evidence that the continual stacking of different stratigraphic patterns is an evolutionary characteristic. 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. This study has the potential to inform organic revitalisation efforts in both urban and rural areas, as well as efforts to preserve and transmit cultural landscape assets in historic districts in both urban and rural areas.

Keywords: *Historic Landscapes, Culture, Sustainable Development, Landscape Architecture.*

Introduction

The intricate concept of "cultural landscapes" is supported by several organisations and governmental organisations. This statement encompasses the natural environment together with any interpretations and alterations induced by human civilisation. Cultural landscapes, besides being sought-after tourism attractions, may underpin sustainable land management strategies. Researchers have transformed their understanding of legacy from singular symbols to expansive landscapes, leading urban planners to broaden their focus from individual cities to whole regions. Cultural landscapes, integral to urbanisation, are inherently tied to specific locations. Regional initiatives may facilitate the formal acknowledgement of cultural landscapes and promote public engagement by developing comprehensive plans that illustrate their evolution and use by communities. These regional plans acknowledge history as a social and economic asset, offering a sustainable framework. The objectives of the model's application are dual: firstly, to safeguard the esteemed heritage; and secondly, to promote economic activities such as tourism, investment, and commerce. They also provide a long-term development program. Integrating the principle of continual adaptation and strategising for future growth may transform historic landscapes into economic catalysts and the cornerstone of revitalisation efforts in their respective regions. The optimal result of transforming the environment into a resource is to enhance the local community in a durable and sustainable



manner. Cultural landscapes may significantly influence sustainable urban development at a regional level. Upon examining global cultural landscapes and historical parks, the authors provide suggestions for their establishment and maintenance. Their objective is to provide a framework for comprehending the intricate interplay between heritage and development, revitalisation and preservation, as well as planning and protection, rather than a systematic model (Rauscher & Humpe, 2022).

Background of the study

To create places that are both beautiful and practical, landscape architects skilfully combine natural and man-made elements. Modern landscape design is based on three tenets: meeting human needs, promoting technological progress, and ensuring environmental preservation. The preservation of landscapes, which serve as archives for cultural and historical narratives, is often neglected in the pursuit of modernisation, despite their critical role in maintaining place and history. Many things about a people's social systems, religious beliefs, and cultural values may be gleaned from their landscapes (Udeaja et al., 2020). Traditional landscape designs, whether for a garden, a holy place, or a city park, always mirror the values and ideals held by the first occupants. These breathtaking sites were also important communal centres, serving as sites for important ceremonies, social events, and even official government business. Some of the factors that led to the development of contemporary landscape architecture include the acceleration of urbanisation, technological progress, and the growth of international commerce. Although these innovations brought forth new materials and processes, it is possible that their cultural and historical importance has been lessened because of how they have standardised their placements. Many are concerned that modern landscapes may lose touch with their history and the people who formerly lived there. The importance of doing research on methods to incorporate cultural and historical elements into contemporary landscape design cannot be overstated. In order to create modern spaces that pay homage to a place's history, designers must take into account both the requirements of modern society and the region's cultural narratives. Primarily, researchers must ensure the preservation of historic places. This research aims to provide contemporary landscape architects with strategies for integrating cultural and historical aspects. They will feel more connected to their heritage and get a feeling of community as a result. This initiative aims to provide solutions that combine innovation with the preservation of historical landscapes by analysing case studies, design principles, and the significance of community engagement (Mishra, 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, 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. After weighing all of the factors, the primary goal of the research is to show how modern landscape architecture may pay homage to the past while simultaneously suiting new needs.



Literature review

"Cultural and Historical Significance in Contemporary Landscape Design: Preserving Heritage in Modern Landscapes" examines modern landscape architects' and designers' use of cultural and historical elements in their projects, exploring several significant topics in the process. Landscapes are more than just physical locations; according to cultural landscape theory and other theoretical frameworks, they also reflect the values, beliefs, and social mores of the people who have produced them. Many historians, including Carl O. Sauer and Christopher Tilley, have highlighted the significant symbolic role that landscapes have in human history and identity. As stated in the Venice Charter, historic landscapes should be conserved via adaptive reuse. Renowned landscape designers James Corner and Richard Haigh look at the prospect of incorporating historical features into contemporary designs (Shen & Chou, 2021). Studying adaptive reuse, or making new uses out of old structures or parts, is critical if researchers are to satisfy contemporary needs without sacrificing cultural significance (Ch'ng et al., 2021). Green infrastructure, historic preservation, ecological restoration, eco-friendly architecture, and traditional materials are some of the topics covered in the writings of Timothy Beatley and Stephen Wheeler. The restoration of Versailles' ancient gardens and the revitalisation of New York City's Central Park are two examples of real undertakings that researchers may investigate to learn how public spaces can honour the past while meeting contemporary needs. Scholars like Ash Amin and Nigel Thrift have voiced worries about the dangers of rapid urbanisation and globalisation, including the loss of regional identity and cultural diversity, which might hinder attempts to preserve cultural heritage. Landscape architects should pay attention to the importance of participatory design methodologies, as pointed out by scholars like Sherry Arnstein. The local community is actively involved in the preservation of their cultural history via these tactics. This shows how important it is for the community to be involved when designing landscapes. It is widely thought that educating the public about history and involving citizens in decision-making processes are crucial for the sustainable protection of historic landscapes. A more all-encompassing and inclusive strategy is required for future landscape design, according to the literature assessment. This implies that contemporary development must include cultural preservation measures that respect and build upon landscapes' historical contexts. At these places, people may still satisfy their modern demands while still feeling a stronger connection to their history and the environment (Pepe et al., 2022).

Research question

- How does social and community identity effects on the preserving of heritage in modern landscapes?

RESEARCH METHODOLOGY

Research design:

Quantitative data were analysed using SPSS version 25. The direction and degree of the statistical association were evaluated using the odds ratio and the 95% confidence interval. Researchers established a statistically significant threshold at $p < 0.05$. A descriptive analysis was used to identify the main components of the data. Data acquired via surveys, polls, and questionnaires, or by modifying existing statistical data using computing tools, is often assessed mathematically, numerically, or statistically using quantitative methods.



Sampling:

Following an initial study involving 20 Chinese academics, a total of 1,400 Rao-soft students were included into the final cohort of investors. Researchers of both sexes were randomly selected and provided with a total of 1,660 questionnaires to complete. A total of 1,536 questionnaires were used for analysis after receiving 1,610, with 74 deleted owing to incompleteness.

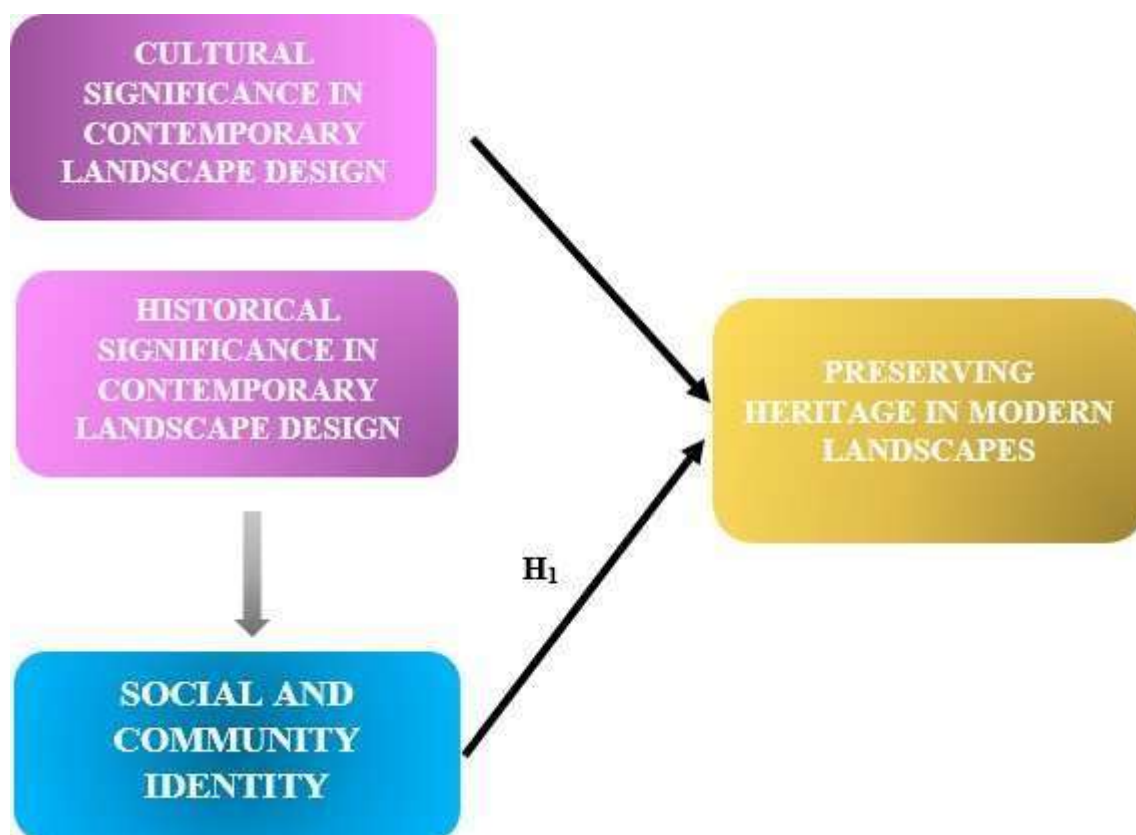
Data and Measurement:

The main tool for data gathering in the study was a questionnaire survey. Part A of the survey requested essential demographic information, while Part B prompted participants to assess various aspects of online and offline channels using a 5-point Likert scale. Secondary data was gathered from many sources, mostly emphasizing online 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

One typical use of Factor Analysis (FA) is to verify the existence of latent components in observable data. When there are not easily observable visual or diagnostic markers, it is common practice to utilise regression coefficients to produce ratings. In FA, models are essential for success. Finding mistakes, intrusions, and obvious connections are the aims of



modelling. One way to assess datasets produced by multiple regression studies is with the use of the Kaiser-Meyer-Olkin (KMO) Test. They] verify that the model and sample variables are representative. According to the numbers, there is data duplication. When the proportions are less, the data is easier to understand. For KMO, the output is a number between zero and one. If the KMO value is between 0.8 and 1, then the sample size should be enough. These are the permissible boundaries, according to Kaiser: The following are the acceptance criteria set by Kaiser:

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 .896

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 0.896 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

| KMO and Bartlett's Test | | |
|---|---------------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .896 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 3252.968 |
| | df | 190 |
| | Sig. | .000 |

Bartlett's Test of Sphericity further validated the overall relevance of the correlation matrices. The Kaiser-Meyer-Olkin measure of sample adequacy is 0.896. The researchers determined a p-value of 0.00 via Bartlett's sphericity test. The correlation matrix was invalidated by a significant result from Bartlett's sphericity test.

❖ INDEPENDENT VARIABLE

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



Integrating or recognising historical features, events, or cultural practices into current landscapes is what is known as "historical significance" in the field of contemporary landscape design. It entails making rooms that are both functional and aesthetically pleasing, paying homage to the past while still catering to the requirements and desires of the present. The use of conventional building materials, the protection of existing historical sites, and the incorporation of architectural concepts that harken back to bygone eras and their cultural significance are all examples of what is meant by this. In modern landscape architecture, historical sites are often included to enhance the story of a location, providing a feeling of continuity, identity, and link to the past, all the while creating places that are useful and appropriate for present-day users. Designers may build landscapes that honour a place's past while encouraging change by striking a balance between the two (Bobasheva et al., 2022).

❖ FACTOR

➤ Social And Community Identity

In landscape architecture, "social and community identity" is how a place represents and encourages a certain group's or community's commonalities in terms of beliefs, practices, and social ties. In order to foster a feeling of community and national pride, it stresses the need of designing spaces that speak to the local heritage, history, and shared experiences. Public places should be places where people can come together, be themselves, and have a sense of belonging, and these designs usually aim to make that happen. Landscape design's ability to represent a community's distinct identity is crucial for fostering social cohesiveness and a shared sense of place, as well as for changing people's relationships with their immediate environment (Granata & Nunno, 2021).

❖ DEPENDENT VARIABLE

➤ Preserving Heritage In Modern Landscapes:

Heritage landscapes, noticed by both modern countries and the International Union for the Conservation of Nature (IUCN) in 2014, are places where cultural and environmental elements have coexisted for a long enough period to form a distinct and potentially protected phenomena. Historic preservation, also known as built heritage preservation, historic preservation, or built heritage conservation in the UK, is primarily concerned with the protection of culturally or historically significant structures, items, landscapes, or artefacts. Keeping human-caused damage to a minimum is one benefit of protecting natural places. To reduce the likelihood of deforestation, forest conservation programs often use sustainable logging techniques. When researchers protect a forest, we're essentially conserving a piece of the territory for future human settlement. In the last few decades, protecting country's dwindling natural resources has risen to the level of a critical national priority. The value of transporting air, water, land, and biological species has become more apparent to the academic community. The situation has become more critical on a global scale, as shown by the Kyoto Protocol and the most recent United Nations session in Johannesburg. The protection of Earth and all forms of life on it is fundamental to these pursuits. They face obstacles such as careless devastation and very fast change (Deligiannis et al., 2020).

❖ Relationship between Social And Community Identity and Preserving Heritage In Modern Landscapes

There is a close link between contemporary landscape preservation and social and communal identity preservation. Both aim to build places that remember the past while creating a feeling



of belonging and continuity for the present and future. Keeping cultural traditions, historic sites, and traditional architectural features that represent a community's past and present is an important part of landscape preservation in the current day. Both the material artefacts and the social and cultural stories that have shaped a people's collective memory are preserved via this process. Landscapes that incorporate historical preservation into modern design may act as living monuments to a community's origins, bringing people together through their common past and strengthening their feeling of pride and identity. By fusing the ancient with the new, contemporary landscapes may become living places where social identity is based on legacy, producing settings that are significant to present-day people and their histories (Piaia et al., 2021).

Because of the above discussion, the researcher formulated the following hypothesis, which was analyse the relationship between Social and Community Identity and Preserving Heritage in Modern Landscapes.

“H₀: There is no significant relationship between Social and Community Identity and Preserving Heritage in Modern Landscapes.”

“H₁: There is a significant relationship between Social and Community Identity and Preserving Heritage in Modern Landscapes.”

Table 2: H₁ ANOVA Test

| ANOVA | | | | | |
|----------------|----------------|------|-------------|---------|------|
| Sum | | | | | |
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 39588.620 | 672 | 8967.986 | 935.431 | .000 |
| Within Groups | 492.770 | 863 | 9.587 | | |
| Total | 40081.390 | 1535 | | | |

The findings of this inquiry will be significant. The F value is 935.431, achieving significance with a p-value of 0.000, which is below the 0.05 alpha level. This denotes the ***“H₁: There is a significant relationship between Social and Community Identity and Preserving Heritage in Modern Landscapes”*** is accepted and the null hypothesis is rejected.

Discussion

Due to the interconnections among physical geography, agricultural systems, and rural life, cultural landscapes—an everlasting part of human history—have lately been a popular subject in rural studies. Cultural landscapes are now front and centre thanks to globalisation and the concept of sustainable development. Recognising cultural landscapes for the important history they hold is just as important as working to conserve them. Cultural landscapes are essential to legacy because they may be studied, evaluated, documented, and passed on to future generations in a variety of ways. Raising awareness, improving tourist content, and contributing to the establishment and reinforcement of social identity are just a few of the ways in which they may aid individuals, organisations, nations, and transnational communities.

Conclusion

There are several "treatment options" for cultural property, but preservation usually involves keeping artefacts as close to their original state as possible while minimising disruption. Both the form and the content of the present landscape have been maintained. Successful restoration



projects may include alterations ranging from small to large, allowing for contemporary additions and improvements without compromising significant historic aspects or materials. Restoring a structure or its elements to their original condition, as documented in detailed historical documents, is the ultimate aim of restoration and rebuilding. Because of the high level of participation required for the latter two treatments, meticulous record-keeping is usually required. Rural sustainability has been impacted, cultural landscapes have been wrecked, and local identities have been lost as a result of people's changing perceptions brought about by environmental changes and urbanisation. Cultural landscape indicators were also shown to be linked to cultural identity, which encompasses not only social norms and behaviours but also community family structures and practices, social concepts, and institutional functions. The reaction process was affected by the cultural and physical landscapes of the area's towns. Developers and managers of any given area would do well to take into account the people's cultural landscape perceptions and how such views could affect physical landscape alterations.

REFERENCES

1. Rauscher, M.; Humpe, A. Traveling the Past: Raising Awareness of Cultural Heritage through Virtual Reality. *J. Promot. Manag.* 2022, 28, 128–143.
2. Mishra, M. Machine learning techniques for structural health monitoring of heritage buildings: A state-of-the-art review and case studies. *J. Cult. Herit.* 2021, 47, 227–245.
3. Pepe, M.; Alfio, V.S.; Costantino, D.; Scaringi, D. Data for 3D reconstruction and point cloud classification using machine learning in cultural heritage environment. *Data Brief* 2022, 42, 108250.
4. Ch'ng, E.; Feng, P.; Yao, H.; Zeng, Z.; Cheng, D.; Cai, S. Balancing performance and effort in deep learning via the fusion of real and synthetic cultural heritage photogrammetry training sets. In *Proceedings of the 13th International Conference on Agents and Artificial Intelligence*, Online Streaming, 4–6 February 2021.
5. Bobasheva, A.; Gandon, F.; Precioso, F. Learning and Reasoning for Cultural Metadata Quality: Coupling symbolic AI and Machine Learning over a semantic Web knowledge graph to support museum curators in improving the quality of cultural metadata and information retrieval. *J. Comput. Cult. Herit.* 2022, 15, 1–23.
6. Granata, F.; Di Nunno, F. Artificial Intelligence models for prediction of the tide level in Venice. *Stoch. Environ. Res. Risk Assess.* 2021, 35, 2537–2548.
7. Deligiannis, K.; Raftopoulou, P.; Tryfonopoulos, C.; Platis, N.; Vassilakis, C. Hydria: An Online Data Lake for Multi-Faceted Analytics in the Cultural Heritage Domain. *Big Data Cogn. Comput.* 2020, 4, 7.
8. Piaia, E.; Maietti, F.; Di Giulio, R.; Schippers-Trifan, O.; Van Delft, A.; Bruinenberg, S.; Olivadese, R. BIM-based Cultural Heritage Asset Management Tool. Innovative Solution to Orient the Preservation and Valorization of Historic Buildings. *Int. J. Archit. Herit.* 2021, 15, 897–920.
9. Shen, J., & Chou, R. J. (2021, 04). Cultural Landscape Development Integrated with Rural Revitalization: A Case Study of Songkou Ancient Town. *Land*, 10(4).
10. Udeaja, C., Trillo, C., Awuah, K., Makore, B., Patel, D., Mansuri, L., et al. (2020, 03). Urban Heritage Conservation and Rapid Urbanization: Insights from Surat, India. *Sustainability*, 12(6).