

DEVELOPING INVENTIVE AND BALANCED APPROACHES IN INTERVENTIONS FOR PRESERVING CULTURAL PROPERTIES

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Abstract: *This study explored some benefits of a comprehensive approach based on findings from a critical and comparative analysis of literary sources, books, articles, studies and a PhD thesis submitted by the researcher. The methodology, findings and arguments for this article were primarily selected upon evaluating various sources using qualitative research with content, narrative analysis and grounded theory where non-numerical data from varying texts have been analyzed and compared to gain insight into the problems and solutions in the field. This was employed in the research design, data collection, analysis and the general framework. In its concluding findings, this study suggests that a holistic, sustainable method is likely to foster many merits. Including the promotion of an ambience of tolerance and better enduring results in the long-term that can preserve the integral structure of a cultural entity or object.*

Keywords: *comprehensive, cultural heritage, interventions, strategy, sustainable.*

1. Introduction

With a broad topic that encompasses various fields and sciences like the preservation of cultural properties, there is a necessity to develop novel strategies and approaches that can accommodate the existing or arising complexities. Prior to the eighteenth century, conservation work consisted of conventional restoration and techniques propelled by the appreciation of objects and antiquities from past periods. Nowadays, the philosophy of intervention has broadened with the advent of modernity. Similarly, the development of these theoretical concepts has contributed to the familiarity of the wider modern notions of environmental protection and sustainability in the field of cultural heritage protection. (Aslan, 2016).

With a growing grasp of global citizenship behaviours, the implications of national culture and global culture must be addressed. In addition, the transition from legal status to civic virtues is a needed discussion. Furthermore, the notions of culture and heritage are two terms that are often used synonymously and interchangeably. It is essential to gain an awareness of this, as it can present complexities that may affect the efficacy of interventions. (S. Al Nahyan, M. Stephens, F. Panz, F. Kotsi).

Theories and endeavours of preservation must take into consideration the factors of sustainability and the quality of its environment. (Z, Aslan). With this being said, it is crucial to emphasize that there is no definitive model for interpreting, defining or managing heritage. There never should be. Our methods and interventions should evolve through experience, study and time. (E. Langham, D. Baker). Such approaches can also be beneficial in cases where non-professionals or professionals do not have objective knowledge of the

strategies of heritage protection. This can also result in practical solutions that challenge the status quo or established wisdom. (J. D. Miller, 2011).

2. Conceptual Framework

This article aims to shed light on the notion of cultural properties from distinct perspectives by evaluating, discussing and proposing methods to develop and nourish satisfactory strategies that suit the interchangeable needs of cultural heritage conservation. It is intended to provide a view of the above topic from a slightly distinct standpoint. With the hope of adding a modest contribution to the existing knowledge on the development of adequate strategies and holistic approaches for the conservation of cultural heritage.

The conceptual framework of this article evaluated existing theories, approaches and models from established bodies of knowledge and literature to provide a structure for analyzing the research problem. The purpose and title for this paper were selected following a Phd thesis submitted by the researcher, where a lack of modern theories or approaches to deal with the topic of cultural heritage preservation was noted. Therefore, this research aims to provide more depth to this area due to its criticality in this field. Especially since a prominent part of available literature is outdated in a time of swift technological and global shifts.

The parameters of the article are aimed at illustrating the natural evolution of the phenomena of cultural heritage protection in differing settings and over time. Moreover, it aims to provide a flexible base from which other future researchers may refer to in order to develop new additions to the evolving subject.

The researcher highlighted the existing obstacles to the enhancement of theoretical and practical methods of heritage conservation. Including case studies, various arguments from diverse sources and eventually the proposed solutions, findings, prospects and conclusions reached by the researcher.

3. Research Method

This work intended to illustrate the researcher's stance and views from an objective position after discussing the topic and evaluating other outlooks in the literature review. In addition, it considered the findings of others to reach an objective conclusion by the researcher. The majority of findings were reached by a method of qualitative investigation of data from distinct sources. On the other hand, the quantitative method was referred to briefly to enhance the validity of the research by obtaining data from statistics and document reviews in the original PhD dissertation and in this article.

The researcher believes that selecting the above methods besides other instruments like case studies helped to structure the design of the research method critically and objectively to promote reliability and consistency of results in the long term. Moreover, these methods were suitable for the nature of the topic and allowed for liberal and comparative evaluations with ethical research considerations.

4. Findings

4-1. Local Knowledge as a Research Instrument to Save Heritage

Local knowledge results from experiences and practical use that span centuries. It can be embedded in communal traditions, associations, relationships and rituals. Local wisdom is a dynamic and transferable shared knowledge that depicts the implicit or explicit. (Andrea Sieber).

The incorporation of local knowledge can be advantageous when integrated with social inclusion (which also includes sharing experiences with other areas). A local viewpoint is significant in the function of preservation. It gives a valuable perspective on natural disasters and other factors. Some of these aspects have been lost in many places today. Local knowledge is imperative for comprehensive and successful preservation efforts. (Andrea Sieber).

4-2. The Need for an Accessible Cultural Heritage

It is worth noting that awareness of heritage can be helpful in acquiring functional strategies for identifying recognizable themes in a society. With that being said, the researcher notes that local awareness can lead to a positive alternation in the nature of cultural heritage. Such as when a type of food evolves or a tradition. Thus, leading to a continuous, natural form of evolving preservation that will reduce economic burdens but also contributes to creating practical solutions developed within the local environment. Heritage definitions may vary among people or interpretations. This is why it is essential to comprehend elemental theories. (Cheng, Yang, Cai, 2020).

4-3. Integrated Strategies for Profound Interpretation and Preservation of Cultural Heritage

The progression of heritage preservation demands an open policy for investigators from all fields of heritage sciences. This can lead to unprecedented betterment in methodologies and applications, which influences the interpretation, conservation and understanding of global tangible culture. Facilitating partnerships between visionary researchers in heritage sciences will positively influence analytical, biological, and engineering practices in cultural heritage research. It can result in the discovery of novel manners to ease the complexity of multi-scale studies on heritage objects by integrating instrumentation, material composition, and physical properties with cultural notions of production, definition and conservation. (Anon, 2022).

Other strategies which can be considered by investigators include blended multi-level techniques towards a broad introspection of intricate heritage systems, interconnected interpretation issues, adoption of refined techniques, high-definition imaging, high-resolution mass spectrometry, nanoscale examination for the analysis of production procedures in archaeology, natural history in addition to novel approaches for the study of plant and animal particles present in old and historical objects. (Li, Zhao, Huang, Law, 2021).

4-4. New Heritage Approaches

The preservation of our collective heritage in the 21st century faces recent challenges from urban expansions, climate changes, unsustainable tourism, as well as socio-environmental and armed conflicts. New heritage approaches need to explore causes, effects and solutions. The objective of such frameworks should be to develop integrated sites from a territorial and urban landscape standpoint. In addition to regarding the tangible and intangible extents of cultural heritage and exploring approaches to decolonize the notion of heritage. Sustainable strategies must combine social participation and heritage education evolution. (Anon, 2021).

Since conservation evolved into a recognized discipline, preservation specialists have intended to uncover the fairest criteria for interventions. Usually, the benchmarks are unclear, since each historic building

has its own unique conditions. Theoretically speaking, this viewpoint is ideal, but in reality, it has profound consequences due to the lack of a consistent methodology. (Robles, L. 2010).

The researcher believes that the heritage preservation sector demands proper evaluative studies which can induce practical knowledge to support scientists and conservation research institutions in locating new pivotal areas of research and optimize methods as well as findings. Nowadays, heritage conservation requires the development of fresh materials and new application strategies. Furthermore, prominent data technologies could be valuable to underline unspecified correlations, detect hidden patterns, and areas of overproduction along with participatory designs to upgrade and distribute existing scientific knowledge. (Jorge Otero, 2021).

4-5. Dissemination of research

Presently, scientific journals are the predominant medium for disseminating study outcomes throughout the global scientific community. Yet, accessing these journals is pricey and limited in some developing nations. This is known by UNESCO as “the information gap.” Meanwhile, universities and research institutions in affluent nations provide their researchers with updated online access to most scientific journals. On the other hand, a lot of conservation is required in poorer countries. However, institutions cannot afford it and scientists lack access to progressed and fresh peer-reviewed scholarly literature. The World Health Organization (WHO) declared in the year 2000 that 65% of research institutions in poorer nations are not subscribed to any international scientific journals. Another pertinent survey published in “Nature” indicated that only eight nations in the world produce 85% of global publications. As a result, some outstanding scientific conclusions lack satisfactory dissemination and are seldom transmitted into practice. (Jorge Otero, 2021).

Until the present date, there has not been any real publication on a macro-perspective study or scientific data pertaining to the learning and supervision of cultural heritage preservation data. This is startling because studies in heritage preservation are incredibly rich in the form of data they contain. Nowadays, studies are advancing without macro-perspective tendencies. (Jorge Otero, 2021).

It is vital to equip research societies with an adequate environment, so that investigators may elaborate on available knowledge and highlight new findings. This helps to assure that efforts are not duplicated in studies or implementations. Currently, there is a wealth of scientific data. The conservation science proceeded from scarcity to an abundance of data in just 30 years. In this regard, extensive heritage research databases are obtainable at various scales, but the question is can conservation scientists and researchers access this immense quantity of unstructured new data? And do practitioners receive the best results? Actually, few studies are appropriately published outside of academic platforms to leave a mark in the practical field. However, when research is published on academic platforms (e.g. Academia or ResearchGate), it can be strenuous to specify verified data among current studies. This can be in part due to the complexity of the preservation field or acquiring the data. The researcher remarks that incorporating upcoming technologies in heritage conservation fields such as heritage digital libraries and large online databases would contribute enormously to solving these issues. (Jorge Otero, 2021).

This novel manner of production founded on peer partnership and consensus-driven arrangements can also help to reduce other hindrances. For instance, lessening the existing imbalances between affluent and poorer nations. Availability of data could be made more prevalent to decrease what UNESCO calls the “information gap.” Additionally, this could enrich the flow of knowledge from scientific data to practicality. Promoting a tangible, interdisciplinary exchange between all heritage experts across various geographical parts, socio-economic disciplines, and environments. Moreover, it is possible to develop initiatives such as the open-source conservation encyclopaedia, which can support the reduction of further global heritage obstacles

by designing a more participatory scheme to disseminate recent scientific information (open science). Such projects could also attend to the needs of global heritage specialists by providing new means to expand their preservation possibilities while augmenting the capacities and skills of additional unskilled practitioners, diminishing inequality, encouraging promising learning prospects for all, and enhancing competitiveness in skilled jobs. (Jorge Otero, 2021).

5. Literature Review

5-1. Preserving the Intangible

Professor Robert Parthesius, director of Dhakira Center for Heritage Studies at New York University Abu Dhabi, has worked on World Heritage projects for over three decades. He argues that heritage authenticity is broad and not merely confined to objects and buildings. Parthesius refers to Japan as an example, where temples are reconstructed every 10 years under the Buddhist principle of rebirth. “In the West, the priority is to preserve old structures, yet different cultures believe in maintaining the essence of these buildings. Otherwise, a structure loses some of its meaning and significance if it is merely preserved”. (C. Malcolm, 2017).

In this sense, some aspects of heritage aren't entirely compatible with the Unesco framework, which is a successful model but takes a Eurocentric approach to heritage conservation. “We need to think in terms of cultural and natural landscapes, and how people and entities fit into that landscape.” In this regard, Parthesius is optimistic that the remit of the Dhakira Center for Heritage Studies will create possibilities for additional World Heritage nominations in the UAE. (C. Malcolm, 2017).

If we observe this area presently, it is clear that multiple elements do not manifest physically anymore. Rather, they could be perceived from an intangible heritage perspective. These are instantly available through storytelling and oral tradition. (C. Malcolm, 2017).

5-2. Museum Versus Persistent Heritage

Professor Parthesius also contends that there is currently a lack of appropriate supervision where historic constructions could be assigned to different functions. He gives an example of Zanzibar, “where buildings were divided into multi-family homes, thus splitting the cultural connection”. (C. Malcolm, 2017).

Furthermore, there is a rising enthusiasm for blending technology into the cycle. He is in communication with other university departments about the possibility of creating equipment and software to scan at-risk objects that can then be integrated with other resources to develop a virtual multi-sensory heritage world. (C. Malcolm, 2017).

The declarations of Parthesius are useful to the topic because they highlight some subtle distinctions that could easily be overlooked like the shift from physical to intangible heritage of some cultural aspects in the U.A.E. Furthermore, a fair point is made in regard to preserving the integrity of the structure. I mentioned previously that this is fundamental in many cases of preservation. Finally, I believe that the creation of a multi-sensory heritage world is a step in the right direction for wider adoption or development of holistic solutions. (C. Malcolm, 2017).

6. Discussion

The preservation of cultural properties is valuable for upholding a society's identity and heritage. Nurturing inventive strategies permits the integration of modern technology and techniques. This can enrich the efficiency of interventions while still respecting the integrity and authenticity of the properties. (Anon, 2019).

There must be available options for conservation work and a number of these should be examined. Sometimes, an approach of no intervention, except observation could be advisable to preserve the integrity of the sight. Nevertheless, a balanced approach allows for the formulation of custom interventions that are specific to the obstacles faced by each property by aiding in its preservation against varying events or circumstances. Therefore, to invent adequate strategies pertinent to the specific context, investigators will need to address different traditional and new aspects in the field. (J. D. Miller, 2011).

6-1. Current Methodology for Assessing the Vulnerability of Built Cultural Heritage

Ever since conservation evolved into a distinguished discipline, specialists have continually sought out the most fitting criteria for interventions. Usually, the uniqueness of each historic building creates a vagueness in finding an objective answer or intervention technique. Some methods which are suitable at one level, have profound consequences due to the lack of a compatible methodology. The idea of values is much more prevalent in Anglo-Saxon countries. And when it comes to the history of preservation, several cases are continually utilized as prototypes: for instance, the Arch of Titus or the Colosseum in Rome. Both interventions are vastly admired and included in multiple heritage conservation manuals. (Robles, L, 2010).

Diagnosing the condition of constructed cultural heritage is an intricate assignment. Taking into account the factors linked to building materials besides natural and environmental aspects. Correspondingly, the particularity of research concerned with heritage vulnerability makes it onerous to reproduce and does not stimulate real comparisons of global vulnerability between different buildings. Therefore, it is critical to provide a common methodology for primary vulnerability review. Afterwards, a standard foundation could be founded for more detailed examinations. Similarly, acquiring a transdisciplinary approach that applies and demonstrates a connection between building materials and structure, its state of preservation, location and the environment in which it is encountered will be useful. Such studies should consider artistic, architectural, geological, biological, chemical, or environmental data, among others. (Laura Damas Mollá, Maialen Sagarna, Ane Zabaleta, Arantza Aranburu, Iñaki Antiguiedad, Jesus A. Uriarte, 2022).

The preservation of constructions and built heritage, in particular, demands complex studies of their vulnerability. Such studies need to consider the present condition of the building, i.e. degradation. In addition to the factors that principally affect the structure. These are not confined to the design of the construction, local and environmental elements. Accordingly, attending to the vulnerability of structures must regard the structure itself as well as the environment. (Jorge Otero, 2021).

Diagnosis of the condition of built heritage is a task which necessitates delicacy in various aspects. Whether in specifying the characteristics of construction factors, or those of the building materials, natural and environmental factors. These three elements are the causes of construction instabilities. Assessing the degree of vulnerability of the structure is fundamental in setting the most suitable sequence of observation and analysis for every case under study. (Jorge Otero, 2021).

Many published works intended to clarify the vulnerability of constructions in specific cases. A considerable number of these publications discuss vulnerability matrices and typical elements that depend on diverse patterns of solutions. Research into vulnerability in architectural cultural heritage seeks to evaluate the building materials' weathering cycles. Further innumerable studies assess the susceptibility to natural perils, like earthquakes for example. Some studies concentrated on aspects such as coastal processes. Further investigations highlight a necessity to consider the interactions between multiple elements, natural factors, and resulting deterioration. Meanwhile, climate change studies influence built heritage and provide an applicable model for interplay analysis, as they estimate the interaction between the variables. (L. Mollá, M. Sagarna, A. Zabaleta, A. Aranburu, I. Antiguada, Jesus A. Uriarte, 2022).

6-2. Heritage Protection From a Theoretical Perspective

Heritage definitions may vary among people or interpretations. This is why it is essential to comprehend elemental theories. To be able to develop new theories and relate them to existing ones. This field is thriving, as it encompasses preserving legacy and transferable information from the past through institutions such as libraries, archives, museums and an increasing number of online platforms. Some of these assets face the threat of decline, due to neglect, environmental factors, conflict, industrialization, globalization and scarcity of available research or the inadequacy of the methods utilised. Therefore, intervention strategies are formulated to tackle such hindrances and preserve heritage for posterity. This includes proper policies, maintenance procedures, risk management, and preservation. (N. Patrick, 2018).

Conceptual frameworks are the nucleus of research. They set guidelines and enhance the goals and results. Providing researchers with a framework to reflect upon their own works and develop a more critical approach. Moreover, a discipline can be considered progressed if it can apply theory in the valuation and production of knowledge. (N. Patrick, 2018).

The researcher believes that preservation requires a complete strategy that encompasses partnership with the private sector for cross-funding. This can reduce competition for funding and enhance conservation quality. Resulting in a developed theoretical framework and more sustainable outcomes in the long term. Furthermore, working with the inhabitants could improve the standards of conservation extensively. (L. Cheng, J. Yang, J. Cai, 2020).

6-3. Perceptions of the Past

In order to develop new strategies, we must first evaluate the past critically. As historical research can uncover phenomena involving structural behaviour. From there, questions can be formulated and raised to reach the optimal strategies within methodological perspectives in conservation. Eventually, adequate methodologies or inquiry will need to explore the concept of cultural heritage, its philosophical interpretation and manifestations of how discourse or dialogue can alter such perceptions. This is because it is a product of forming a sense of identity, reinforcing social cohesion, and progressive reconciliation. Whereas the negative potential to trigger conflict, perpetuate or reinforce symbols of oppression, and recreate trauma could also be underlined. In addition to considering indigenous, decolonized, non-nationalistic, and non-Western interpretations. (Anon, 2019).

6-4. Problematics of the Present

The progression of this area necessitates the adoption of a more pragmatic focus and addressing the threats to heritage besides the solutions presented through existing, new and proposed methods or fields of

research methodology. These include treating matters such as unsustainable tourism, the consequences of climate change on tangible and intangible heritage, the destruction of structures through conflict, the trafficking of cultural objects, the effects of rapid urbanization, separation from roots and history due to population displacement. (Anon, 2019).

6-5. Current Factors for Which Boader Methodologies Need to be Developed

A combination of scientific and cultural knowledge besides experience is indispensable for the study of cultural heritage structures. The purpose of studies, research and interventions is aimed at safeguarding the cultural and historical value of the building. A holistic approach is needed for a periodic evaluation of buildings. Considering the construction as a whole rather than just the assessment of individual elements. Treatment needs information on the design, its conception, constructional techniques, the processes of deterioration and wear, transitions and eventually its present state. The analysis of the structure requires an interdisciplinary procedure. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

Presently, there is an augmenting tendency towards conserving global architectural heritage. This could be attributed to the social, economic, and cultural advantages they provide. The adaptive reuse of heritage structures is becoming widespread while urban planners and developers seek to attain an equilibrium. Whether academically or practically, the adaptive reuse of heritage buildings necessitates pertinent, appropriate, and scientific standards for assessing built cultural assets. Nonetheless, research remains scarce. Hence, the methodologies of research require expertise from other fields, like science, chemistry, or geology. The deficiency in technical proficiency or devices may hinder research efforts. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021)

There is a need for a complete understanding of the structural and material characteristics of any project in buildings. Diagnosis is founded upon qualitative and quantitative methods. A qualitative approach stems from the direct observance of the structural wear and material decline in addition to historical and archaeological analysis. Meanwhile, the quantitative approach demands material and structural examinations. Treatment needs to attend to the root causes rather than the symptoms. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

The notion of adaptive reuse itself contains a sustainability orientation, which needs to be guided by scientific frameworks, methodologies, and processes. Numerous studies have sought to integrate heritage, adaptive reuse, and sustainable growth into a holistic strategy for conservation and development. It is worth noting that scholars started paying more attention to strategic approaches, decision-making strategies, design plans, assessment methods, multi-criteria analysis and human engineering since the year 2018. These studies are extensions of preceding research on sustainability, sustainable development, adaptive reuse and historical conservation between 2010 and 2017. Such studies have retained relevance as they complement progressive theoretical development in this field. Henceforth, we can deduce that the analysis of research frameworks, assessment models and methodologies connected to sustainability, and adaptive reuse will be influential for progression in the near future. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

Multiple recent research frameworks highlight issues of urban adaptive reuse. Discussions pertaining to research frameworks often present interdisciplinary and multi-dimensional conceptual models. In essence, the adaptive reuse of architectural heritage provides an innovative potential for the social, cultural, functional, environmental, and financial needs of a community. Moreover, adaptive reuse of architectural heritage can enrich local economies, environments and social conditions through sustainable solutions. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

Any framework that contributes to the reuse of heritage constructions should have criteria ascertaining that the adaptive reuse will not impact heritage values and that it will adhere to historic preservation, integrated research and sustainable plans. In regard to sustainability issues, a usual discussion would often estimate the joint relationships among social, environmental and economic factors. Similarly, such research often aims to balance preservation through objectivity, cooperation and the diffusion of prominent benefits. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

Investigators have proposed a myriad of research frameworks for consideration. Yet, it is still laborious to achieve equilibrium in the various pursuits of adaptive reuse projects. Furthermore, the increasing emphasis on adaptive reuse is partly due to the criticisms against the renewal of heritage buildings. Additionally, commentators contend that recent attempts to adapt heritage facilities are too narrow. Since they often fail to echo the depth and breadth of local society, culture, and history. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

Heritage experts and conservationists argue that successful adaptation involves appreciating the existing historical nature of a structure while enabling a progressive alteration in function. In this regard, there has been a paradigmatic shift in architectural preservation, from precedence on conservation to an adaptive reuse approach relevant to sustainable development and regional growth. As Pendlebury states, heritage is a cultural process and social practice. Therefore, it is crucial to perform an extensive assessment of architectural heritage before undertaking any adaptive reuse project, as strategies have evolved. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

Adaptive reuse requires a macro perspective, which includes considerations of economic growth, protecting the environment and social equity. Similarly, planners recommended a sustainable development triangle which consists of three introductory preferences for planning. On the same note, Campbell, claims that resources, property and expansion symbolize the triple corresponding junctures of conflict. Those are subject to society's positive orientation like social welfare, environmental issues and the economy. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

Treating social issues induced by these conflicts is beneficial in architectural heritage planning. This triangular framework constitutes a single reference point for planning, cooperation, and evaluating architectural adaptive reuse. Accordingly, sustainability can be viewed as an enduring process to settle conflicts among these three broad design objectives. Adaptability in architectural planning has been amplified to solve predominantly societal problems that arise from the revitalization of old industrial zones, urban areas, and vacant industrial plants. The triangle of triple points encloses internal connections, external sustainable variables and interchangeable goals when referred to in the adaptive reuse of architectural heritage. This creates frameworks that correspond to UNESCO's sustainable development agenda definitions. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

From the perspective of planners, Townsend acknowledges that modern strategic planning theories and adaptive reuse have the same goals and need a comprehensive evaluation process. Moreover, the reuse cycle must be fulfilled within a broad assessment framework of the values, ideas, histories, and communities that exist around the architectural cultural heritage. Correspondingly, this thorough procedure is founded upon an interdisciplinary method, which underlines the inner and outer relations between economics, nature, society, and psychology. Townsend's theory promotes planning that is aligned with adaptive reuse. Thus, facilitating an integrated strategy to ensure scientific and analytical objectives are met while also preserving the tangible and intangible components that are substantial to sustainability. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

Assessing adaptive reuse in architectural heritage is a multi-interest procedure that involves the consideration of historical, scientific, financial, and aesthetic values. In addition, development visions are blended with planning strategies. On another note, some suppose that flawless strategic planning systems are usually closely bound to local histories and look forward to future visions and demands. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

The writer of this paper proposes that interventions be proportional to safety ideals. Keeping such interventions to a minimal degree permits safety and durability. The preference between “conventional” or “creative” methods should be distinguished separately in each case. The nature of materials used in conservation work (particularly new materials) and their compatibility with existing materials need to be specified. This must incorporate a long-term approach to minimize side effects. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

The researcher suggests a methodology that aligns with the current interpretation of appreciating structural authenticity. Where preservation is based upon familiarity and insight into the essence of the design and the factual causes of alterations. To adopt prudent interventions (minimal and non-intrusive), with emphasis on knowledge of the material and history. Ultimately, the researcher highlights the stature of partnerships between architects, historians, engineers, physicists and others as earlier interventions could have entailed multidisciplinary aspects. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

The researcher also notes that the perception of heritage has shifted from historical antiques to critical assets for socio-economic and cultural growth. Presently, the Historic Urban Landscape (HUL) approach emphasises harmony and continuity. It regards notions of dynamic integration and sustainability of interventions in the adaptive reuse procedure. Using this approach can be practical, as it needs detailed methods of evaluation. Additionally, it also regards the continuity of cultural contexts, historical environments, meanings and values. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

A definition of remedial measures should therefore contain the ensuing steps: data acquisition, structural, historical, and architectural investigations, field study and observation. These stages must be finalized precisely to obtain an elaborate assessment and avoid undue conservation measures or inadequate safety levels. Naturally, the adoption of such frameworks in the context of sustainability also present challenges. However adequate adaptive reuse prevails based on UNESCO’s sustainable development goals. (Y. Li, L. Zhao, J. Huang, Andrew Law, 2021).

7. Conclusion

7-1. Encountering balanced and strategic philosophies of intervention

Given that the concept of safeguarding heritage has yet to evolve into a comprehensive and adequately planned framework for its sustainable development, there is a need for well-suited high-quality interventions to ensure satisfactory long-term performance and aesthetic coherence. It is vital to reach a level of sufficient integration of cultural heritage with the protection and planning of landscapes. (J. D. Miller, 2011). To attain this, the researcher posits the subsequent measures:

Gain an understanding of the existing sequence: it is necessary to obtain an insight into the historical sequence of a structure to comprehend it sufficiently and define one age from another. (J. D. Miller, 2011).

Reversibility: any modification must allow, where possible, removal in a future instance so that the original material can be recognized and made distinct from the intervention. (J. D. Miller, 2011).

Learn from building types: historical constructions seldom exist as separate examples, and the engineer is advised to leverage the knowledge of others in studies and discussions to build up a comprehensive view of the potential behaviour of the buildings we encounter. (J. D. Miller, 2011).

Archive: professionals have a responsibility to document discoveries, and a greater duty to record alterations. (J. D. Miller, 2011).

Structural integrity: the materials and structural systems utilized as an intervention should keep harmony with the original building. Structural forms and the selection of materials must be balanced to ensure compatibility and originality. (J. D. Miller, 2011).

A background of conservation philosophy provides a basis to raise awareness and ultimately achieve wider recognition of promising conservation practices, experienced by example. (J. D. Miller, 2011).

7-2. Heritage and Culture as Pillars for Sustainable Development Through Understanding and Tolerance of Cultural Differences

Heritage and culture serve as pillars of sustainable development by promoting an environment of understanding and tolerance towards cultural differences. Similarly, tolerance can be nurtured at individual, family, societal and institutional levels, both nationally and internationally. The appreciation for a diverse array of cultural expressions allows for the preservation of unique practices and traditions. Embracing cultural differences encourages collaboration, dialogue, and mutual learning. Eventually leading to more equitable and inclusive development strategies. This nourishes the collective well-being while celebrating the richness of the global cultural tapestry. Nahyan, M. Stephens, F. Panz, F. Kotsi).

Culture and heritage are temporally aligned and are manifested in culture as the outcome of a selection process. Although portrayals of culture and heritage vary, the two terms are perceived to be fluidly interconnected. The merits of a wisely preserved heritage are many. It can nurture a sense of identity and safeguard cohesion for instance. Within this unique individuality, a sense of belonging and the seeds of the culture of tolerance can thrive. (S. Al Nahyan, M. Stephens, F. Panz, F. Kotsi).

It is also vital to be aware of the differences in perception of what constitutes heritage from one place to another. For instance, in the West, heritage is perceived as a celebration of the historical or monumental past. Meanwhile, the notion of cultural heritage is considered to some degree to be an experience of the present in the UAE for example. In turn, such observations can result in a general fluidity of perceptions and experiences in this regard and eventually promote more holistic approaches for interventions in conserving cultural properties. (E. Langham, D. Barker).

In conclusion, any comprehensive philosophy for interventions will seek to encounter a balance regarding long-term sustainability. Moreover, balanced approaches can help bridge gaps between different generations, cultures and societies. The researcher contends that the findings of this thesis could be enhanced

by referring more broadly to other paradigms of the obstacles that are less highlighted. Like the need for incorporation of technology to accelerate and reinforce conservation measures, among other things. Furthermore, it could be said that gaining an insight into subtleties that are oftentimes overlooked like perceptual differences of the concept of heritage can yield consecutive benefits like a fluidity of perceptions and experiences that eventually promote more holistic approaches for interventions in conserving cultural properties. (E. Langham, D. Barker).

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