Dr. Zuleika Homavazir, Vijay Srivastava

SUSTAINABLE APPROACH TO THE CONSERVATION OF ENVIRONMENT

ALEXIS PRESS
JERSEY CITY, USA

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Published by: Alexis Press, LLC, Jersey City, USA
www.alexispress.us

First Published 2022

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication Data

Includes bibliographical references and index.

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ISBN 978-1-64532-914-5

CONTENTS

CHAPTER 1

AN ECONOMIST'S VIEW OF SUSTAINABILITY IN BUILT ENVIRONMENT CONSERVATION

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ABSTRACT:

Usability in the built environment preservation is a subject that is becoming more and more important in today's society. My perspective on this topic as an economist is centered on the financial benefits and incentives connected to sustainable practices in the preservation and development of the built environment. This summary gives a concise outline of the important factors that economists take into account when assessing sustainability in built environment preservation. First off, sustainability is based on the fundamental notion of economic efficiency. Economists examine how resources are distributed and work to achieve maximum effectiveness in order to reduce waste and increase output. This refers to the efficient use of resources, such as energy, water, and materials, in the built environment in order to lessen adverse environmental effects and raise cost-effectiveness. Second, economists understand the value of long-term viewpoints. Future generations' requirements are taken into account in sustainable building practices, ensuring that decisions made now will not interfere with their ability to meet their own needs in the future. The long-term preservation of the built environment depends on this component of intergenerational fairness.

KEYWORDS:

Cultural, Economic, Heritage, Sustainability.

INTRODUCTION

Decisions Relating to Architectural historians, urban planners, conservationists, and other allied professionals have traditionally focused on the preservation of the built environment. But in recent years, increased costs and a growing lack of resources have made it more important to consider the financial implications of these choices. As a result, financial analysts, accountants, and economists are becoming more and more involved in the decision-making process. In general, we may distinguish two extreme approaches to the economic issues posed by the preservation of cultural assets in an urban setting. On the one hand, it is possible to view the principles and practices of the conservation profession as unchanging and unassailable, providing a rigid framework onto which an evaluation of the financial effects of decisions made solely in terms of the conservation issues at hand can be grafted. On the other hand, the economic environment might be taken for granted, and conservation practices might be seen as having to adjust to what are perceived as inevitable changes in the economy; these changes include an increasing emphasis on financial incentives and market-driven resource allocation, as well as an imperceptible shift from serving the needs of the general public to those of individual consumers. To put it another way, this viewpoint would regard conservation decisions as being subject to

unchangeable restrictions imposed by an economic agenda that, like it or not, is becoming more and more prominent in local, national, and worldwide affairs[1].

These two extreme strategies don't really make much sense. Conservation cannot and should not continue to be a closed, only-self-referential profession. 1 However, the inescapable expansion of international trade and the predominance of economic considerations in the development of global policy do not negate the importance of social, cultural, environmental, and other humanistic values in guiding choices regarding our futures. Sustainability is a crucial concept for making decisions about the preservation of the built environment as well as providing a comprehensive framework for understanding how economic, social, cultural, and biological systems interact. This is because neither of these extreme positions is realistic.I'll put together a straightforward example to show how sustainability emerges as a key idea in an economist's approach to urban conservation. Let's say a local government or community organization owns a historic landmark or building in a town or city, which may be virtually anywhere. It might be a commercial building, a town hall or a market. Whatever it is, it is thought to have some cultural value for the town's inhabitants and possibly some appeal to out-of-town tourists. The neighborhoodorganization is looking for suggestions on how to rehabilitate the area, possibly by changing how the structure is used to accommodate modern requirements. They decide to hire an economic expert to assist them in developing a conservation strategy since they are concerned about the financial ramifications of any redevelopment project. There are three sorts of consultants that they might use[2], [3].

DISCUSSION

The first type is a sizable business consulting organisation that can handle anything, including product creation, financial planning, investment guidance, and marketing strategy. Let's assume that the local committee in our example uses such a company. The committee is advised by the firm's economist assigned to the historic conservation project that profitability must be the main priority. The renovation must be planned to make the most money possible because doing so will boost the town's economy by creating new jobs and revenues. It is claimed that the optimal proposal will involve substantial architectural modification to enable retail growth, advertising placement, and the installation of comprehensive facilities geared towards tourists. The consultant acknowledges that there may need to be some concessions along the road, but contends that where there is a conflict, for example, between historical accuracy and economic potential, the latter must take precedence or the project will suffer financially. It goes without saying that the plan suggested by such a consultant is likely to be crude, offensive, and careless[4], [5].

The small group of economists recruited from the economics department of the nearby university serves as an example of the second kind of economic consultants that could be employed. These guys are much brighter than the major accounting firm's commercially motivated consultant.They understand that the financial benefits of a historic project extend beyond what is merely shown in the bottom line, and that by focusing just on the direct monetary gains, a significant contribution to the community would be missed. They inform the committee that the main advantages of built cultural heritage are, in fact, intangible in nature and consist of things like locals' pride in their town's cultural facilities, the connections that a heritage building represents with local history, the educational value of presenting heritage to the public, and the symbolic role that heritage plays in representing people to themselves. The economists even go

so far as to say that this historic building has benefits that go beyond the town's borders and that the nation as a whole, as well as locals, should be concerned about the site's future because it is a component of the nation's overall inventory of cultural resources. The team uses a lot of jargon to impress the committee, including terms like "public goods," "external benefits," and "nonmarket effects," but their goal is still obvious: to expand the definition of benefit beyond what accountants find when they only consider monetary profit and loss.The economists here suggest performing both a financial analysis and a concerning the project and what they call a "contingent valuation study."In order to determine the extent to which the above-mentioned intangible benefits actually exist in the minds of the community, as well as how much these recipients of intangible benefits would be willing to pay (for example, out of local taxes, by donation, or through some other means) for these benefits, residents, tourists, and other participants will be surveyed. It will be possible to determine the overall amount that the people would be willing to contribute to the project from the sample survey results. The whole evaluation of the project's economic value might then take into account this monetary appraisal of the aggregate demand for the project's intangible advantages. The economists acknowledge that, until a way is found to "capture" all or some of this willingness in the form of actual payments, their estimations of willingness to pay remain hypothetical and have no bearing on the project's actual financial results. They offer a few alternatives for reaching this goal, like the creation of a foundation fund where people would be requested to donate, or a tiny fee on local government rates that may be designated for the project[5].

Even without such capture, a local government body may find some solace in an analysis of the intangible advantages of a heritage project. For instance, my colleague and I conducted an economic analysis of a cultural centre that was located in a historic home in a town in rural Australia in the early 1980s. The local council was worried that the centre would burden ratepayers with ongoing expenses that would require yearly funding from general council funds. However, the rate of return on capital was revealed to be rather healthy when the value of the intangible benefits of the arts centre to the local community was brought in and calculated through a contingent valuation exercise that we did. This outcome convinced the council that the running costs for sustaining this cultural project were appropriate given the community's nonmarket benefits and residents' willingness to pay for them[6].

In our current example, the second set of consultants' proposal to broaden the definition of economic benefitthat is, to complement the project's appraisal of its direct use values with an assessment of its benefits to a larger constituencyis undoubtedly a significant improvement. Numerous similar studies that have paid close attention to quantifying the intangible advantages of built heritage have emerged in recent years. These studies reflect an extension of empirical techniques that have been widely used in appraising the intangible advantages of environmental amenities and resources into the field of cultural heritage. Examples include a study of the preservation of the historic Northern Hotel in Fort Collins, Colorado (Kling, Revier, and Sable 2000), a study of the restoration of Bulgarian monasteries (Mourato and Danchev 1999), an estimate of the public-good benefits of a variety of heritage sites in Naples (Santagata and Signorello 2000), and an evaluation of a project involving the cleaning of Lincoln Cathedral in England (Pollicino and Maddison 2001).

However, it is still unclear if all of the values connected to a cultural project can be quantified using a single monetary value. While it is true that a variety of personal motivations, such as aesthetic, social, and spiritual concerns, may lead people to enjoy both the direct and indirect

benefits of cultural heritage, there is some debate as to whether expressing these values in terms of willingness to pay accurately captures the nature of the benefits at stake. We need new ways to conceptualise heritage that take into account both economic and cultural dimensions in order to shift the focus away from an individualistic economic model and towards a more comprehensive assessment that acknowledges that some aspects of cultural worth may not be expressible in terms of market prices or willingness to pay. One such strategy is to view cultural heritage objects as cultural capital, whose management can be viewed within the context of sustainability. Please allow me to briefly define these words.Think about a physical example of our history, like a structure. As an asset, it may share many of the same external or physical features as a typical building: it was built by humans, it can be bought and sold, it has a finite lifespan, it will deteriorate if it is not maintained, and it generates a stream of services over time. In essence, it is a real estate asset just like any other. However, it's worth goes deeper. The building's value extends beyond its purely economic value due to its historical significance, potential significance as a symbol of the local community's culture, aesthetic qualities as an example of a particular architectural style, and a variety of other factors. These later components of the building's value might be referred to as making up its cultural value. This value will undoubtedly have an impact on the economy[7], [8].

In general, more people may be willing to pay for an asset's acquisition, usage of its services, or merely preservation the higher its cultural valuethat is, the more cultural significance it reflects. However, there is no reason to assume a one-to-one relationship between economic and cultural value; examples of the two being at odds with one another abound. For instance, listing a structure judged to have high cultural value may actually lower the price at which people will pay to buy or use it if listing involves significant regulation restricting the building's reuse.The benefit of classifying cultural assets in this way as components of cultural capital is that it allows for the analysis and evaluation of the cultural resource's economic and cultural contributions within a cogent and rigorous framework.

The intervention can then be considered a capital investment project if it involves the spending of public or private cash. We can argue that recognising the cultural resource as an item of cultural capital allows the application of the well-known instruments of investment appraisal in the current case, where the asset is a historic urban building and the project is the restoration and reuse of the site. Since the project's cultural value has been identified in addition to its economic value, the economic evaluation can be strengthened by a cultural appraisal that is conducted in a similar manner. This allows for a parallel benefit-cost analysis where both the economic and cultural value's time-streams can be evaluated.

This leads us back to sustainability since, when considering a heritage building as a piece of cultural capital, the long term is automatically brought up, and the idea of sustainability offers a framework for assessing the long-term issues associated with managing capital assets. As is well known, the phrase "sustainable development" is most frequently used in relation to the environment as a result of the work of the Brundtland Commission, also known as the World Commission on Environment and Development (WCED).

We might continue by stating that, similarly to how natural capital (the stock of natural resources and ecosystems) serves future generations, cultural capital also exists as a source of cultural goods and services that benefit both the present and the future. We can manage cultural capital in a way that serves our individual or communal goals by upholding it, adding to it, or

allowing it to erode over time as a society or as individuals. What guidelines should we use while making managerial decisions? Such a collection of principles emerges by clarifying what sustainability means when applied to cultural resources. Thus, rather than attempting to define sustainabilitya task laden with difficulties given its complexitywe may instead offer a framework for determining if a given activity (a project, a policy choice, etc.) will or won't produce a sustainable outcome[9], [10].

Finally, we reach the third category of economic expert that the neighborhood committee might use. This economist is employed by a company called Sustainable Solutions, Inc. The company is made up of a collection of experts who are accustomed to working as an interdisciplinary team. In fact, the first thing this economist tells the committee is that the analysis of the project's economic and financial aspects must be integrated with a thorough and equal assessment of the cultural values, and that this can only be done successfully in a team setting in order to take into account all the project's implications—economic, social, cultural, historical, environmental, and so on. She contends that the fundamentals of sustainability offer the right framework for integrating these issues and directing the creation of the best restoration plan. Generally speaking, the sustainability tenets that might be especially pertinent to my illustrated scenario include the following:

1. Generation of material and nonmaterial benefits.

This principle calls for a thorough study of the project's tangible and intangible advantages, or the kinds of effects covered above and that would be quantified in a thorough economic analysis.

2. Intergenerational equity

Recognizing the ethical obligation of the current generation to manage resources in a way that does not jeopardise the welfare of future generations is a fundamental tenant of sustainability; as such, more weight should be placed on future benefits and costs when adding up the time-stream of benefits and costs generated by a project. than might be justified in a study that is only financially motivated. In other words, according to this notion, resources should be nurtured over the long term. rather than using someone temporarily for personal advantage.

3.Intergenerational equity.

The distribution of wealth and income among the current generation is subject to the fairness principle, which society recognises but which is sometimes ignored or marginalised in the sake of economic efficiency. This concept, which is a part of sustainability, shows in the example provided that the project's equity effects would be taken into account, for instance by examining whether all social groups in the community have equal access to the project's direct benefits.

4. Precautionary principle.

This principle suggests that judgements that result in irreversible change shouldn't be made lightly and that an increased duty of care is required if, for instance, a significant structural adjustment is suggested that couldn't be reversed if it turned out to be mistaken.

Diversity and the interconnectedness of systems.

In a sense, this principle, which states that a holistic viewpoint is necessary and acknowledges that all components of any system are interconnected in some way, can be used to sum up the

entire idea of sustainability. The idea argues that no one aspect of the local committee's legacy project—its economic, social, cultural, and environmental effects—can be managed in isolation under the current situation, and that no one aspect may be given preference over any other. In particular, the principle suggests that a thorough evaluation would make an effort to reconcile the economic and cultural interpretations of value. If successful, this process would make it possible to determine whether and to what extent an evaluation of the economic value that takes into account both use and nonuse values might fall short of a thorough understanding of the cultural significance of the project.The type of research that would be necessary to provide a thorough sustainability analysis of a specific heritage project along these lines, paying attention to all the factors discussed above, would be both more extensive and more complex than, say, a simple financial assessment, needs little to be added. The use of these concepts in actual programmes preserving cultural heritage is, in fact, still in its infancy. Several of the issues have been clarified by a recent research project conducted at the Getty Conservation Institute, particularly with regard to the assessment of value interpreted from economic and noneconomic perspectives, the treatment of heritage as cultural capital, and the sustainability principles that are pertinent to conservation decisions. However, comprehensive multidisciplinary empirical applications have yet to be made; to an economist, such applications could be very helpful in highlighting both the benefits and drawbacks of economic evaluations using contingent valuation and other assessment methods, for example. As a last question, we could ponder what prospects the local committee in our example and the thousands of other coalitions ofCommunity interests around the world that are struggling with the same issues of how to protect cultural treasures in a more globalised worlddependent on the needs of the market? In this paper, I've made the case that the concepts of sustainability and cultural capital, which are related, can help us move forward in integrating the financial and cultural effects of conservation decisions, much like the way that concepts of sustainable development have been so effective in allowing us to view the commercial exploitation of natural resources in a broader ecological context. There has been significant theoretical advancement in the study of sustainability and cultural capital. A more thorough empirical verification of these claims in practical settings is therefore urgently required.

CONCLUSION

The need of economic efficiency, long-term thinking, taking externalities, incentives, and market dynamics into account are all emphasised from an economist's perspective on sustainability in built environment conservation. Economists can help to advance sustainable practises in the built environment by including these factors in their analysis and decision-making. Utilising resources effectively to decrease waste and boost production reduces the negative effects on the environment and increases cost-effectiveness. This rule makes sure that scarce resources are used wisely, taking both immediate and long-term demands into account. As economists are aware of the need to protect the built environment for future generations, sustainability requires a long-term perspective. Intergenerational equity is protected by making actions that do not jeopardise future generations' ability to meet their own needs.

Externalities, or costs and benefits that are not accounted for in market prices, are a key component of economists' analyses of sustainability. To achieve sustainable results, it is crucial to acknowledge and take these external costs and advantages, such as societal or environmental repercussions, into account when making decisions. To promote sustainable behaviours in the built environment, incentives are effective methods. The adoption of sustainable practises can be promoted by policymakers by coordinating financial incentives with environmental objectives.

In order to break down market barriers and encourage sustainability, the cost-benefit analysis might be influenced by tax incentives, subsidies, or other measures. For economists, market dynamics and innovation are equally important factors. It is vital to comprehend how market incentives and structures can promote innovation and the adoption of sustainable technology and practises. A supportive environment for sustainable growth in the built environment can be created by policies, legislation, and market processes. A full understanding of economic efficiency, long-term perspectives, externalities, incentives, and market dynamics are all part of an economist's perspective on sustainability in built environment conservation, in conclusion. By combining these factors, economists may offer insightful analysis and practical suggestions to advance sustainable practises, preserving the built environment's long-term viability and promoting the wellbeing of current and future generations.

REFERENCES

[1] E. Avrami, "Sustainability and the built environment: forging a role for heritage conservation," Conserv. Perspect. GCI Newsl., 2011.

[2] L. A. Valdivia Espinoza, T. F. Gonzalez Manrique de Lara, and A. M. Julca-Otiniano, "Environmental sustainability of forestal concessions in huanuco department, Peru," Madera y Bosques, 2020, doi: 10.21829/myb.2020.2632062.

[3] A. Singh, P. V. Sampath, and K. P. Biligiri, "A review of sustainable pervious concrete systems: Emphasis on clogging, material characterization, and environmental aspects," Construction and Building Materials. 2020. doi: 10.1016/j.conbuildmat.2020.120491.

[4] S. Yildiz, S. Kivrak, and G. Arslan, "Factors affecting environmental sustainability of urban renewal projects," Civ. Eng. Environ. Syst., 2017, doi: 10.1080/10286608.2018.1447567.

[5] Ö. Karakul, "An integrated approach to conservation based on the interrelations of tangible and intangible cultural properties," Metu J. Fac. Archit., 2011, doi: 10.4305/metu.jfa.2011.2.5.

[6] L. Zúñiga and R. Pérez, "Los recursos construidos de valor patrimonial en un modelo de gestión ambiental urbana," Eure, 2013, doi: 10.4067/S0250-71612013000200004.

[7] M. S. Berry, M. A. Repke, and L. G. Conway, "Visual Exposure to Natural Environments Decreases Delay Discounting of Improved Air Quality," Front. Public Heal., 2019, doi: 10.3389/fpubh.2019.00308.

[8] K. F. Hmood and G. Dişli, "Sustainable development of urban conserved heritage: An analytical study of Kursunlu mosque in Ulus, Ankara," Int. J. Sustain. Dev. Plan., 2019, doi: 10.2495/SDP-V14-N3-273-288.

[9] O. K. Akande and R. E. Olagunju, "Retrofitting and Greening Existing Buildings: Strategies for Energy Conservation, Resource Management and Sustainability of the Built Environment in Nigeria," J. Sustain. Archit. Civ. Eng., 2016, doi: 10.5755/j01.sace.15.2.15557.

[10] C. J. Rivera and C. Savage, "Campuses as living labs for sustainability problem-solving: trends, triumphs, and traps," J. Environ. Stud. Sci., 2020, doi: 10.1007/s13412-020-00620-x.

CHAPTER 2

AN URBANIST'S PERSPECTIVE ON THE RELATIONSHIPS BETWEEN HISTORIC PRESERVATION AND SUSTAINABILITY

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ABSTRACT:

The interdependence of these two ideas in the context of urban development is explored from an urbanist's viewpoint on the links between historic preservation and sustainability. In order to examine the connections between historic preservation and sustainability, an urbanist must take into account many important factors, which are summarized in this abstract. Focused on the conservation and protection of historically important structures, communities, and cultural assets. While preserving the capacity of future generations to fulfil their own needs is a key component of sustainability, addressing current demands is not. Although these ideas may seem to overlap, an urbanist analyses their significant intersections. First of all, an urbanist understands the sustainability that is built into historic preservation. By lowering the demand for new construction and the resulting resource consumption, preserving and reusing existing structures and infrastructure supports sustainable development. The environmental performance of historic buildings may be improved by retrofitting them with energy-efficient technology and materials. Second, the urbanist looks at the social and cultural aspects of sustainability and historic preservation. Feeling of place, feeling of community, and cultural history are often present in historic neighborhoods. By fostering pedestrian traffic, small businesses, and public transit, protecting these areas may encourage social cohesion, improve neighborhood wellbeing, and advance sustainable urban lifestyles. Thirdly, the adaptive reuse of old structures may be profitable and help foster urban economies that are sustainable. Historic preservation initiatives may provide employment, draw tourists, and revitalize communities, resulting in economic development and a reduction in urban sprawl. Historic structures may encourage local enterprise and the creative industries by being preserved and used.

KEYWORDS:

Development, Metropolitan, Resources, Sustainable, Preservation.

INTRODUCTION

The origins of worry about the effects of human civilization on the environment may be found deep within the American psyche. The Progressive movement of the late 19th and early 20th centuries, the muckrakers, the Regional Planning Association of America, the city planners and attorneys who started the city planning movement in the United States in the first decade of the previous century, the garden city movement, the Tennessee Valley Authority, and the other environmental initiatives of the New Deal all stand as predecessors to the environmental movement that exploded on the American scene in 1970 with the passage of However, it wasn't until the 1970s that the significant and escalating effects of human activity on the environment

were recognized, and that's when the idea of sustainability as we know it today was first developed. Limits of Growth by the Club of Rome, which was released in 1972 (Meadows et al. 1972), issued a warning that was largely heeded. In 1972, the United Nations launched the Environment Programme, and the Cocoyoc Declaration, released in 1974, acknowledged that mankind was at a crucial juncture. The statement read as follows (quoted in Friedman 1992:2): "Environmental degradation and the increasing pressure on resources raise the question of whether the 'outer limits' of the planet's physical integrity may not be at risk." It was declared that meeting the fundamental needs of the world's poor was more important than just maximizing GDP [1], [2].

In 1983, the United Nations General Assembly formed the World Commission on Environment and Development (WCED).According to its report, Our Common Future, "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987), which is a definition of sustainability that is often referenced. United Nations Conference on Environment and Development The 1992 Rio de Janeiro Earth Summit was a significant and significant worldwide gathering on development.

It approved two significant papers. The Rio Declaration urged the countries that pollute to help with environmental cleanup and acknowledged that social fairness and economic prosperity must coexist. George W. Bush, the president To the dismay of the European Community authorities, a recent refusal to execute the Rio Declaration's offshoot, the Kyoto Accord. Agenda 21, the second key document, outlined a comprehensive list of objectives and more than 120 methods for accomplishing them.

Once again, it acknowledged that "[h]umanity stands at a critical juncture in history. As Sitarz (1993) puts it, "We are faced with a continuation of differences between and within countries, a worsening of poverty, hunger, disease, and illiteracy, and the ongoing degradation of the ecosystems on which we rely for our well-being. This line of reasoning was followed at the Istanbul Habitat II Conference in 1996, which also reaffirmed the need of social fairness and the development of human resources in the pursuit of genuinely sustainable development. We now realise that in order to achieve social justice, we must find a means to encourage technical innovation, social learning, and social transformation. Our patterns of production, reproduction, consumption, and disposal must work in harmony with the ecological system's ability to sustain life over the long term. We need to develop methods to recycle more effectively, absorb the garbage we create, and regenerate the raw materials we use to make energy and things without endangering the foundational natural balances. What we mean by sustainable development is this [3], [4]. As urban conservationists, the four areas that overlap in our sphere of interest are as follows:

a) The social structures and cultural practises that pass on our ideals from one generation to the next;

b) The economic and technical sectors that influence how commodities and services are produced and distributed, particularly the built environment;

c) The planning processes and legal structures that provide social standards teeth; and

d) The constructed environment that exemplifies historical social and aesthetic customs.

DISCUSSION

In A Sand County Almanack, Aldo Leopold (1966:253) said that in terms of natural processes, "Land... is a fountain of energy flowing through a circuit of soils, plants, and animals." According to Leopold, the social, cultural, religious, economic, and legal structures that each of our cultures have established facilitate the movement of energy and resources. The energy flow is undoubtedly what connects the two. The human economy will eventually collapse if we continue to use energy at an unsustainable pace. Keeping diversity and preserving cultural heritage may be considered as antientropic goals of the historic preservation and cultural conservation movements. differences between different cultures and neighborhoods' built environments, which include buildings and other physical features, and their cultural environments, which include values. By drawing a comparison to natural systems, they might be seen as preserving cultural variety, just as environmentalists work to preserve biological diversity. Every monument, landmark, location, urban neighborhood, city centre, and natural environment is a unique creation that can be worth protecting. Conservationists work to counter the homogenization of fashion and culture brought on by the invasive technology of the Internet, communications, television, and other mass media, the cell phone, "big box" commercialism, and the globalization of so many facets of our lives in the twenty-first century [5], [6].

The Unsustainability of Human Activities

Every continent's natural ecosystems have been progressively disrupted by human activity during the last 200 years. A global ecology that was previously roughly in harmony has been pushed out of balance by them. One of the reasons of this imbalance is the tremendous increase in human population, which went from less than 1 billion in 1800 to 6 billion in 2000.Thankfully, the pace of population increase has slowed down recently and is now just over 80 million annually. By the end of 2012, the population of the planet will increase by another billion. With the help of technology, which is rapidly expanding in both power and scope, we have the ability to drastically alter the planet's surface, whether by consuming nonrenewable resources, releasing large amounts of carbon dioxide, methane, and other "greenhouse gases" that may be causing global warming, or polluting the planet's air, water, and soil. Nearly the previous century, the atmospheric concentration of carbon dioxide has grown from 280 to nearly 360 parts per million. The average sea level increased 4 to 8 inches throughout the 20th century. The ice caps at the poles are melting. Additionally, during the last 100 years, the average temperature of the planet has increased by more than 1 degree Fahrenheit (U.S. Environmental Protection Agency, 2001).

It is an issue of causation: Is the increase in carbon dioxide levels a consequence of the planet being warmer as a result of absorbing more solar energy, or is it a result of human activity increasing levels of the so-called greenhouse gases? More and more experts are coming to the conclusion that human activity is at least somewhat contributing to global warming. Rapid growth in the per capita use of natural resources, energy, and human services and goods are indicators of the rising wealth of at least first-world countries and the top class of inhabitants of other "worlds" The ability to consume more resources and energy will rise as emerging nations boost their quality of living, and because of their vast populations, their effects on the environment will be more pronounced. A major extinction of species caused by humanity's attack on the environment is comparable to the previous five global extinctions. things have occurred throughout the last half billion years, such as the end of the dinosaur era 65 million years ago brought on by the impact of an asteroid. In fact, according to E. O. Wilson (1992), if

we do not make significant changes to our behavior, as many as one-fifth of all species on the planet might become extinct due to human causes by 2025 [7], [8].I used these examples to demonstrate that humankind's current course of action, which is based on a growing population polluting the environment and consuming nonrenewable resources wastefully, is unsustainable and that the present course will cause the collapse of modern human society within a few centuries. But what does this have to do with sustainability and historic preservation, you ask? What duties do advocates for historic preservation have? Our rashly unsustainable path of action has many root reasons, thus the solution also has many parts, some of the most crucial of which fall within the ambit of the historic preservation movement. There are, in my opinion, two main areas that warrant legitimate worry. The first focuses on how to manage the broad processes of urban centre development and renovation in a manner that supports sustainability. The second focuses on the concrete, practical, and politically viable programmes for preserving and restoring the built environment that have been passed down to us from earlier periods.

Sustainable Approaches to the Conservation of the Built Environment: The Link between Sustainable Development and the Conservation of Urban Settlements and Monument

We want to preserve cultural variety in much the same manner as environmentalists seek to preserve biological diversity, with respect to the protection of historic neighborhoods and city centres, as well as specific monuments and locations of great natural beauty. We work to restore and protect built environment elements that were created decades or centuries ago and that represent the ideals and beauty of the past. Every kind of urban settlement, including medinas in the Arab world, mediaeval walled towns in Europe, American frontier settlements, mission towns in Mexico and Peru, and even the suburban neighborhoods that encircle American cities, may be compared to one another. Although we should be careful to avoid drawing unjustified inferences for one subject based on data from the other and from making simplistic parallels between cultural variety and biological diversity, the similarity is informative.

For instance, locations like Morelia in Mexico, the French Quarter in New Orleans, Society Hill in Philadelphia, the urban cores of European cities like Santiago de Compostela, Grasse, and Rothenburg, and the medinas of North African cities like Fez and Kairouan, to name a few I am familiar with, impart to future generations a unique aesthetic, a perception of the built environment, and a perspective on the relationships between humankind and our environment. Additionally, they include significant material resources. When they were constructed, energy was used, and if they were to be destroyed and replaced with modern urban portions, energy would be used. The infrastructure that supports them may be said to be the same. Consequently, since these urban settlements represent cultural values from various times (and so, to continue with the biological analogy, create several species of urban areas), as well as because of the resources and infrastructure These ancient communities need to be protected because of the energy that was used in their development and upkeep throughout the years. Less distinctive urban regions are comparable, and for the same reasons, they should also be preserved. Urban conservation and sustainable development are connected by this manifestation (Hawken 1993). However, due to resource constraints, the conservation community is faced with the issue of creating a set of priorities and strategies that would enable it to concentrate its efforts on the protection of those resources where the benefit-cost ratio is most favourable [9], [10].

Due to the differences in urban growth and redevelopment processes across various civilizations, managing urban resources presents a variety of challenges. For instance, suburban expansion and

downtown blight have dominated metropolitan development in the United States. On the outskirts of our metropolitan centres, whole new towns are developing, while the inner cores of our cities are losing population and employment, and the people who remain there are disproportionately poor and from minority groups. In North Africa, squatter colonies that are often found close to downtown areas and the relocation of rural people to the oldest portions of towns are what are known as the "habitats spontanés" of the area. Still other kinds of urban expansion and redevelopment may be seen in other regions of the globe, such as western Europe, where country populations are steady or dropping. It is comparable to clearing a rain forest and replacing it with grassland or monocrop tillage to destroy the diverse neighbourhoods that define the world's cities and replace them with homogenous 21st-century towns. Entropy rises and cultural variety is decreased.

The Broader Strategy: The U.S. Experience

At least since World War II, national urban development strategy in the United States has prioritised encouraging suburban expansion, as have current state and municipal laws, financial incentives, and perhaps consumer preferences. The interstate highway programme, mortgage insurance and guarantees for suburban housing, and government funds for the building of suburban water supply, sewerage, and sewage treatment facilities serve as examples of this policy at the federal level. Low-density suburban and exurban residential zoning rules have been used at the metropolitan level to promote widespread growth along the borders of our metropolitan regions and a virtual abandonment of inner-city districts. In addition to restricting huge regions to single-family detached homes on lots of one acre or more, local governments have overzoned for industry, underzoned for townhouses, apartments, and mobile homes, and set onerous and expensive development regulations. Their goal is to safeguard the local fisc by restricting new construction to commercial and industrial purposes and relatively pricey dwellings, all of which provide tax revenue. That more closely match their allotted portion of municipal spending. At the very least, they often also have the effect of omitting Low- and middle-class families who pose a danger, in their opinion.

The rule supports the ideal shown in Norman Rockwell's painting of a young couple raising their two children in a modest suburban home as the woman works about the house and the kids have fun playing in the backyard. But an increasing number of households do not fit this mould. The proportion of homes with a mother and father and children has decreased to roughly 25% of all households due to delayed marriage, fewer children, greater divorce rates, and increasing lifespan. A society that is unsustainable is the result of the policy that encourages suburban development. It wastes our valuable resources and endangers the capacity of our country to compete on a global scale.

A significant percentage of our capital stock of natural resources, including prime farmland, temperate forests, and ecologically significant places, is lost due to low-density, scattered residential construction. Automobile-driven suburban sprawl also causes traffic jams, air pollution, and excessive travel times to get to places like job, school, and retail malls. Urbanists are now aware of the close connections between land use, transportation, and air and water quality, or the "LUTRAQ Connection". More people drive more often when residential construction is dispersed. Greater emissions of nitrogen oxides (NOx), sulphur oxides (SOx), and particulates are produced as a result of the increased usage of automobiles, which in turn worsens the issue of ground-level ozone and acid rain deposition.

The expense of the public infrastructure, which underpins the economy, is also increased by our metropolitan urban growth programme in two ways:

1. Due to the centrifugal urban expansion it causes, significant funding must be allocated to water and sewer systems, sewage treatment facilities, schools, and other necessary infrastructure.
2. As our major cities lose residents, big regions are abandoned and their extensive infrastructure is inefficiently underutilised. There is too much water and system capacity in many cities. Furthermore, the resources utilised to build the mostly abandoned regions of our older cities lay fallow and serve no public use.

To put it simply, we are wasteful on two fronts: we increase the actual cost of constructing new residences, businesses, industries, and public buildings to satisfy the requirements of our families and our companies, and we underutilize the built stock we already have rather than finding creative ways to reuse it. We increase our manufacturing expenses, which lowers our ability to compete in the global market. In its most blatant form, urban sprawl involves the underutilization or abandonment of dwellings together with an ever-widening ring of land that is converted from agricultural, forest, and other open uses to suburban land uses. And infrastructure resources situated in the centre of metropolitan regions, not to mention the people who live there and the human resources they represent. With its focus on the preservation and renewal of historic elements of our building stock and infrastructure as well as the cultures that support their continuation, historic preservation can greatly aid in reducing sprawl and fostering a more sustainable process for metropolitan development.

Sustainable Metropolitan Development: An Alternative to Suburban Sprawl

Limiting centrifugal movement and shifting growth pressures back to the ageing centres of metropolitan regions are two benefits of sustainable metropolitan development, which aims to minimize effects on natural resources on the periphery and maximize returns on investments in infrastructure in the center. It would make use of amenities in already developed regions and protect significant natural resources like farmland and forestland. We must develop and put into practise a new policy for metropolitan development in order to address the many negative aspects of suburban sprawl.

This new policy will build on recent efforts to find ways to make our national and state policies for environmental protection and land development more sustainable. Such a programme results in a steady state where older suburban sectors are continuously renewed as they age, together with a dynamic redirection of urban growth pressures from the periphery of metropolitan regions inward to the centers. A metropolitan region may be thought of as having three main subarea types: the older core areas, which were mostly constructed before World War II, the postwar suburbs, and the rural-urban periphery. Some of the older, nearby suburbs are starting to feel the effects of obsolescence as it spreads out from the city Centre. We should aim to reshape national and metropolitan urban development policies to produce essentially stable, sustainable metropolitan areas, characterized by

a) Continuous redevelopment of older urban areas as they age,

b) In-fill development in the spaces between existing suburban areas,

c) Where new development is appropriate on the urban fringe, a pattern of nodes and corridors that create a sense of place.

A number of significant obstacles stand in the way of such a programme, including the deteriorating housing stock, the inadequate inner-city education systems, neighborhood violence, the relative scarcity of well-paying employment, the high real property taxes, the Brownfields that need undetermined amounts of cleanup, and others. But we must discover means to achieve this goal due to the pressing need for more sustainable development.

CONCLUSION

Preservation planners in the United States must typically aim to reduce urban expansion and promote the restoration of older metropolitan districts. To achieve this, they must concentrate their efforts on employing tried-and-true conservation strategies like transferable development rights, flexible zoning, historic district and landmark ordinances, and tax incentives like low- and moderate-income housing and historic preservation tax credits. Additionally, they need to work to create novel policies, such as those that depend more on command-and-control methods than on market-based incentives. By halting the demolition of areas and structures that represent the values of many eras, such acts would preserve cultural variety as well as the traditional built environment, a feat akin to preserving biodiversity.

REFERENCES

[1] S. Janssen, J. Tahitu, M. van Vuuren, and M. D. T. de Jong, “Coworkers’ Perspectives on Mentoring Relationships,” Gr. Organ. Manag., 2018, doi: 10.1177/1059601116669641.

[2] D. Y. Yeung, H. H. Fung, and D. K. S. Chan, “Roles of age and future time perspective of the work relationship in conflict management: A daily diary study.,” Int. J. Stress Manag., 2020, doi: 10.1037/str0000155.

[3] J. Brooks, “Perspectives on the relationship between records management and information governance,” Records Management Journal. 2019. doi: 10.1108/RMJ-09-2018-0032.

[4] M. N. Barasa, V. I. Khasanda, and G. Nyandoro, “A Discursive Analysis of the Interactive Meaning in Covid-19 Containment Discourses in Social Media: Perspectives on Family Relationships,” Int. J. English Lit. Soc. Sci., 2020, doi: 10.22161/ijels.54.36.

[5] T. Loose, L. Robiou Du Pont, D. Acier, and G. El-Baalbaki, “Time perspectives mediate the relationship between personality traits and alcohol consumption,” Time Soc., 2019, doi: 10.1177/0961463X18758515.

[6] C. Jevons, M. Gabbott, and L. de Chernatony, “Customer and brand manager perspectives on brand relationships: A conceptual framework,” J. Prod. Brand Manag., 2005, doi: 10.1108/10610420510616331.

[7] C. Grönroos, “A service perspective on business relationships: The value creation, interaction and marketing interface,” Ind. Mark. Manag., 2011, doi: 10.1016/j.indmarman.2010.06.036.

[8] L. Jia, J. D. Shaw, A. S. Tsui, and T. Y. Park, “A social-structural perspective on employee-organization relationships and team creativity,” Acad. Manag. J., 2014, doi: 10.5465/amj.2011.0147.

[9] E. M. Volpe, M. M. Morales-Alemán, and A. M. Teitelman, "Urban Adolescent Girls' Perspectives on Romantic Relationships: Initiation, Involvement, Negotiation, and Conflict," Issues Ment. Health Nurs., 2014, doi: 10.3109/01612840.2014.910582.

[10] K. R. Allen and A. L. Jaramillo-Sierra, "Feminist Perspectives on Family Relationships: Part 3," Sex Roles, 2016, doi: 10.1007/s11199-016-0631-0.

CHAPTER 3

CULTURAL LANDSCAPE, SUSTAINABILITY AND LIVING WITH CHANGE

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ABSTRACT:

Humans and their natural settings interact to create cultural landscapes, which are then altered by historical events, cultural practises, and philosophical ideas. Understanding the relationships between cultural landscapes, sustainability, and coping with change becomes more important as societies struggle with issues of sustainability and the need to adapt to change. The main characteristics and linkages between these three components are examined in this abstract.First off, cultural landscapes have inherent values that are strongly ingrained in community identities and customs. These landscapes' preservation and maintenance conserve cultural treasures while also enhancing social cohesion and a feeling of place. In the case of cultural landscapes, sustainability entails striking a balance between maintaining their cultural relevance and meeting changing social and environmental requirements. The long-term vitality of cultural landscapes is crucially dependent on sustainability, which is the second factor. These landscapes should be conserved and preserved while taking into account social, economic, and ecological factors. The resilience and integrity of cultural landscapes depend on sustainable practises such biodiversity preservation, the use of renewable resources, and the support of local economies. Thirdly, the dynamic character of cultural landscapes requires people to adapt to change. These landscapes are not static; rather, they change throughout time in response to a variety of factors, including natural forces, cultural changes, and outside influences. Flexibility, community involvement, and a comprehensive approach are necessary for change adaptation while maintaining cultural values. Recognizing the need of controlling and minimizing possible conflicts brought on by development, climate change, tourism, and other variables that may affect the sustainability of cultural landscapes is a necessary step in this process.

KEYWORDS:

Conservation, Development, Heritage, Landscapes, Sustainability, Sustainable.

INTRODUCTION

A culturally significant area the debate over managing change is at its core. Its components (tree cover, hedges, and land cover) are seminatural living creatures that vary daily and with the seasons. It is fully the result of changes and of the dynamic interaction of human and natural processes. One of its defining characteristics and a key component of what makes it what it is now is change, both past and present. Arresting change is not in doubt. But managing change is necessary. For change to be guided sustainably, conservation should not only be a witness to it but also an integral part of the change-making process. Conservation no longer only involves fighting against someone else's bulldozer of development to save historical relics; it is no longer

an "outside" endeavour. Sustainable development is becoming socially ingrained in part because of it. In the same way that prehistorians discover social and symbolic elements as well as economic ones to explain the European Bronze Age, "conservation" will be one of the processes that future historians see as having molded the world of the twenty-first century. As an archaeologist, I regard human activity as the most important force that has affected the whole terrain over the course of hundreds or millennia. A complicated artefact that may teach us about both the past and the present is the landscape. But to me, a landscape is more of an idea than a physical object and concept that is a product of knowledge, interpretation, and experience. But information is always incomplete, interpretation is always tentative, and perceptions are always subjective, conditioned by experience, self-interest, memory, or imagination. Consequently, it might be difficult to assign cultural landscape value [1], [2].

DISCUSSION

This argument is based on the idea that conservation efforts should aim to regulate change across the historic environment in addition to protecting its "best" features. This viewpoint is especially important for understanding the cultural landscape, which is a dynamic, living system of complex processes that must allow for change if it is not to lose some of its unique characteristics (Fairclough, Lambrick, and McNab 1999). But preserving landmarks and places should equally focus on controlling change. Locations designated as "monuments," apart from daily life, and maintained for study, tourism, or other purposes (such as Guardianship Monuments under state control in the population of England which peaked during the early years of conservation will always be in the minority. Since much of the historic environment is still in use today, it is necessary to realize that one result of continuing usage is continual alteration. Continued use of the historic environment might include finding new applications for existing structures, regenerating urban areas, or cultivating land in novel ways to produce "new" landscape [3].

This is not a defense of the idea that only economic values are important. The historic environment may be valued in a variety of ways, including amenity, aesthetics, and environmental sustainability, academic, educational, and local. All of these methods are based, in one way or another, on non-monetary computations. Maintaining the historic environment has advantages for society that go beyond its monetary value, such as those that are social, personal, environmental, emotional, or psychological. These ideas were clarified in the early 1990s when English Heritage, a government organization in England tasked with fostering appreciation for and preservation of the entire historic environment, published its opinions on sustainability and the historic environment (English Heritage 1997), and they were once more at the Centre of the recent review that led to the publication of Power of Place. Accepting the necessity for change is not the same as saying that all change is acceptable. Sustainability in the historic environment refers to managing change and picking strategies that best use the past's legacies [4]. Therefore, when making any decision about change or how the future will affect the remnants of the past, we should be mindful of two distinct issues:

i. How to balance minimizing loss with the demands of the present,

ii. How to make sure that the balance we strike does not significantly limit our successors options for comprehending and appreciating their inheritance.

iii. What should we maintain for our needs?

iv. What much may the future require?

Thus, "enough-ness" is a key idea in sustainable development. Because "everything" refers to our whole environment, which we must utilise and modify, and because we are obligated to make our own imprint and contribute to history, we cannot pass all that we inherited on to future generations in its entirety undamaged. The most important and doable thing we can do is to leave our successors with some way of knowing their own history, being able to judge its importance for themselves, choosing for themselves how to live with its remnants, and knowing what to pass on to others in their turn. This entails giving them just enough of the historical context to make their own decisions, either unmodified or with reversible alterations. So, passing on alternatives is part of conservation. Although we can't predict what the next generation will want to maintain, we can try to leave behind just enough to give them the freedom to make their own choices and avoid closing too many opportunities. However, as usual, determining "enough" is challenging, particularly when considering the historic environment, which is all-encompassing, our whole habitat, and the basis of our identity. Can you ever have enough? The requirement for two simultaneous ways to determine enough-ness was verified by the review of conservation theory that new thoughts on sustainability triggered. The processes of selective preservation, which characterized the early development of conservation in England, must be preserved, but they must coexist with a more comprehensive strategy intended to manage change sustainably in every aspect of the historic environment [5], [6].

The way archaeological sites are handled in England exemplifies the link between these two conservation strategies. A well-established method of selective preservation is known as "scheduling," a legal term that ultimately derives from the first Ancient Monuments Act of the United Kingdom, passed in 1882. Less than 10% of the sites are protected, and in those cases when permanent preservation is deemed practicable, it essentially halts change in a representative sample of monuments that are deemed to be sufficient, at least for academic and scientific reasons. Parallel to this, however, a broader, more adaptable strategy has been growing as part of the spatial planning system since the 1970s and 1980s; this strategy was codified and made universal in 1990 in government directives to local authorities known as Planning Policy Guidance (PPG) (DOE 1973, 1990). It allows for the entire preservation, alteration, or excavation of any ancient relics by incorporating them into the design of new constructions. This trailblazing PPG elevated the goal of controlling change everywhere to the forefront of conservation [7], [8].

The benefit of managing change across the historic environment is that it expands the scope of conservation. Fewer monuments are protected by selective designation, and conservation efforts have tended to be restricted to a few niche areas, such monuments and structures, or to discrete regions of the landscape rather than the whole area. Conservation efforts have also been limited to a sampling of these fields: the most respected planned gardens, the "best" architectural set pieces, and the most prominent archaeological sites (Fairclough 1999a). On the other hand, attempting to manage change everywhere without necessarily assuming that it would be preserved enables for every legacy from the past to be taken into account when change is planned. Purely scientific or expert viewpoints are seldom sufficient; a future function of conservation might be to encourage the formation and sharing of viewpoints on importance. This should result in a more democratic, inclusive strategy that strengthens shared cultural ownership and safeguards locally significant elements throughout the larger cultural landscape.

The Impact of Sustainable Development on Conservation Theory: Ten Years since Rio

England

Since Rio, several European governments have created national sustainable development agendas. The new U.K. Sustainable Development Strategy is titled "A Better Quality of Life" since it now places a greater emphasis on social issues than only the environment. Economic (development), social (community), and environmental (controlling influence on natural and cultural resources) variables are combined to form sustainable development.Economic goals may still get an excessive amount of attention, but social and environmental concerns are now more widely acknowledged, and cultural concerns are starting to be seen as essential. To transmit a renewable system to the next generation is the fundamental goal of sustainable development. This idea applies to difficulties involving the world's ecosystems, for which it was intended. For the historical setting, the problems are distinct. Sustainability does not apply in this sense since the tangible, physical components of legacy are nonrenewable (once a structure or an archaeological site is lost, it cannot be recovered).

Because heritage is limited and nonrenewable, there was still a persistent notion that sustainable development was a "green" problem unrelated to heritage when English Heritage began to consider it in 1992. However, giving serious consideration to the applicability of sustainable development to the historic environment diverted attention from the physicality of the heritage and its intrinsic or inherent values to people's interactions with it as well as to the various ways in which it is defined and valued culturally. At the same time, a new perspective on the historic environment started to acknowledge that it may be thought of in some ways as limitless and renewable and that it can be found everywhere, not only in unique areas. Due to these mental changes, the sustainability principles started to become more relevant, and two interconnected directions for the future were found.

The first method was size, which involved seeing the historic environment as a whole, rather than as a collection of individual locations, and ideally at a large scale, like that of a city or landscape. By doing so, managing change (which involves balancing gains and losses) becomes feasible. About whatever mix of components, what general character, to leave behind as a type of cultural ecology, there is opportunity for genuine, healthy debate.The second was significant: rather than the physical legacy itself, the renewable system is thus seen as our perspective and assessment of the historical context. This implies that the past environment may be used as a renewable resource. There is continually being created or found new heritage (such as late 20th century heritage, new landscapes of intensive agriculture, the physical remnants of post industrialization, the archaeology of the motor automobile, and cold war sites). More importantly, "old" legacy is always being recreated, altered, and updated, and its importance is being rebuilt in the wake of new ideologies, participants, and political movements.

English Heritage's conceptions of sustainability evolved over the 1990s in large part as a result of thinking at a landscape scale, but they also included concerns with integrated management, spatial planning, quality of life, and landscape (Fairclough 1995). For instance, two volumes of advice for local planning authorities were produced jointly by England's conservation agencies: Conservation Issues in Strategic Plans (Countryside Commission, English Heritage, and English Nature 1993) and Conservation Issues in Local Plans (English Heritage, Countryside Commission, and English Nature 1996). They advocated for the inclusion of conservation into all planning strategies for the built environment, including those pertaining to archaeological,

architectural, aesthetic, and ecological considerations. Simply as distinct policies that see protection as a goal in and of themselves. Additionally, these were among of the first publications to begin articulating what sustainable development really meant in terms of conservation. They examined ideas like environmental capacity and thresholds, but in the context of a mostly unsuccessful effort to employ the metaphor of environmental capital by defining "critical" and "constant" capital of all kinds. In practise, the terms "critical" and "constant" quickly came to represent only nationally significant locations, and the introduction of a third category, "tradeable," did not save the idea [9], [10].

The discussion has since progressed, largely thanks to two initiatives: one that developed a theory of sustainability that was particularly pertinent to cultural and historic resources, and the other that defined the idea of quality-of-life capital as a useful toolkit for identifying and valuing environmental capital. The Historic Landscape Characterization programme of English Heritage was created concurrently and is discussed below. The first of these two initiatives, Sustaining the Historic Environment (English Heritage 1997), took a closer look at how sustainable development relates to archaeology and the historic environment, especially the landscape. It identified numerous difficulties for the heritage sector that were crucial to attaining sustainable development at a time when the broad concepts of sustainable development were becoming more generally understood.

1. A focus on the present rather than the past in general
2. A focus on the contribution of people and their involvement in assessment and decision-making
3. There are many different perspectives on value and importance, such as cultural (identity, uniqueness, location), educational and academic (informational, evidentiary), economic, resource (environmental footprints), recreational (life, pleasure), and aesthetic
4. An emphasis on the importance of the local and everyday as well as the extraordinary.
5. the dissemination of the notion that managing change globally

The more current Power of Place (Historic Environment Review 2000a) reiterated its main tenets, which included the necessity for

1. A greater knowledge and comprehension of the whole historic environment
2. The need of seeing activities in the long term.
3. more engagement of the public in environmental decision-making
4. Sensitivity to several scales (at the moment, crucial, continuous, tradeable, but also regional/local, landscape/place);
5. understanding that changes should be reversible whenever feasible
6. Making educated judgements, or taking preventative measures.

Sustaining the Historic Environment was published as a discussion paper, but it received strong support and broad acceptance but little debate since it was seen from the start primarily as a firm policy statement to direct action (Fairclough 1999c). The Historic Environment: A Force for the

Future (DCMS/DETR 2001), the government's response, and Power of Place both drew heavily on its principal recommendations and points of view.

The idea of "quality of life capital" emerged from early environmental capital theory, which, despite its immaturity, had prepared the way for a new approach. This was broadly described by the phrase "What Matters and Why," which is another way of asking if anything is adequate (see Countryside Commission, English Nature, and English Heritage 1997). The concept of characteristics, or affordances, served as the foundation for the novel strategy. This method takes into consideration a variety of value systems by focusing more on the services, traits, and values that a place or item offers to people than on its fundamental features. It was evaluated in a number of regional pilot projects by a range of organisations at various sizes, and the results were compiled in a thorough manner. Under the heading Quality of Life Capital (Countryside Agency et al. 2001), two application guides (to aid in managing change on specific sites and creating spatial plans) have been released to highlight the shift in emphasis towards the social and to tie to the U.K. Sustainable Development Strategy.

All of these concepts were combined in the Power of Place report to create a laser-like focus on the future of the historic environment. It was the report of a national review of all policies relating to the historic environment that English Heritage conducted for the government in 2000 using a broadly representative national steering group, five working groups, two consultations, and in-depth opinion research (Historic Environment Review. With representatives of property owners, developers, business and community organisations, as well as conservationists, the evaluation was conducted for the heritage and allied sectors. The final report presents an outlook for the historic environment that takes into account its crucial role in society and the economy. Its foundation is proof that the majority of people care deeply for the historic environment, according to significant opinion studies. They see it as a vital component of their identity and way of life, one that is fundamental for their wellbeing.

They want to see it preserved and utilised responsibly for tourism, education, and improving their daily lives. Many of the themes from Power of Places focus on how to guarantee more public and democratic engagement in the choices that govern its maintenance and usage. It highlights the necessity for a thorough grasp of the whole historic environment if change is to be handled responsibly.

CONCLUSION

Cultural landscape, sustainability, and adjusting to change all have complex linkages that need for careful thought. In addition to being essential for safeguarding cultural assets, maintaining cultural landscapes promotes social cohesion and a feeling of place. By striking a balance between the cultural importances of cultural landscapes and changing social and environmental requirements, sustainability plays a critical role in preserving their long-term vitality. Cultural landscapes must constantly adapt because they are exposed to climatic changes, cultural changes, and outside forces. Flexibility, community involvement, and all-encompassing strategies are necessary to embrace change while upholding cultural values. The sustainability of cultural landscapes may be impacted by a number of variables, including development, climate change, tourism, and others. It is crucial to manage these potential conflicts. Innovation and adaptable techniques are crucial for navigating the connections between the cultural environment, sustainability, and coping with change. Sustainable and culturally aware methods may be promoted by fusing conventional knowledge with contemporary methods, empowering local

people, and taking part in participatory decision-making processes. In a world that is changing quickly, cultural landscapes may grow, adapt, and stay relevant by embracing change in a sustainable way. Finally, for the long-term vitality and resilience of these landscapes, it is essential to acknowledge the inherent merits of cultural landscapes, implement sustainable practises, and embrace change while maintaining cultural heritage. Societies may develop a healthy cohabitation between human activity and the natural world within cultural landscapes by combining cultural, environmental, and social factors. This all-encompassing strategy guarantees that cultural landscapes will continue to improve our quality of life, save our heritage, and motivate future generations.

REFERENCES

[1] G. Fairclough, "Cultural landscape, sustainability, and living with change?," in Managing change: sustainable approaches to the conservation of the built environment: 4th Annual US/ICOMOS International Symposium organized by US/ICOMOS, Program in Historic Preservation of the University of Pennsylvania, and the Getty Conservation Insti, 2003.

[2] H. M. Pina, "The Douro landscape heritage (NE Portugal): Modernity and tradition in times of change," Misc. Geogr., 2018, doi: 10.2478/mgrsd-2018-0018.

[3] S. Broadbent and F. Cara, "Seeking control in a precarious environment: Sustainable practices as an adaptive strategy to living under uncertainty," Sustain., 2018, doi: 10.3390/su10051320.

[4] D. M. Pearson and J. T. Gorman, "Exploring the relevance of a landscape ecological paradigm for sustainable landscapes and livelihoods: A case-application from the Northern Territory Australia," Landsc. Ecol., 2010, doi: 10.1007/s10980-010-9498-6.

[5] J. Brown and A. Kothari, "Traditional agricultural landscapes and community conserved areas: An overview," Management of Environmental Quality: An International Journal. 2011. doi: 10.1108/14777831111113347.

[6] D. F. Cushing and A. Renata, "Themes in landscape architecture publishing: Past trends, future needs," Landsc. J., 2015, doi: 10.3368/lj.34.1.15.

[7] F. Appendino, "Balancing Heritage Conservation and Sustainable Development - The Case of Bordeaux," in IOP Conference Series: Materials Science and Engineering, 2017. doi: 10.1088/1757-899X/245/6/062002.

[8] A. Kastanya, "Multi-landscape forest management of small islands in the Moluccas based on green economy," in IOP Conference Series: Earth and Environmental Science, 2019. doi: 10.1088/1755-1315/285/1/012011.

[9] N. Caverley, "Understanding the human dimensions of the mountain pine beetle infestation: lessons learned from the First Nations Mountain Pine Beetle Initiative," BC J. Ecosyst. Manag., 2008.

[10] S. Dhiman, "Selfishness, Greed, and Apathy," in Handbook of Engaged Sustainability, 2018. doi: 10.1007/978-3-319-71312-0_1.

CHAPTER 4

MORE THAN ONE VIEW OF THE CULTURAL LANDSCAPE

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ABSTRACT:

Diverse viewpoints and interpretations that span disciplines, civilizations, and situations are included in the idea of the cultural landscape. This abstract examines the idea that there are several perspectives on the cultural landscape, showcasing the complexity of the idea. First, geography and physical qualities may be used to analyse the cultural landscape. Geographers investigate how cultural practises influence and are shaped by the physical characteristics of a terrain in order to better understand the link between people and their environment. This viewpoint places special emphasis on the outward manifestations of human involvement with the environment, such as landforms, buildings, and patterns of land use. Second, a historical viewpoint is used to study the cultural environment. When studying the layers of human history visible in a landscape, historians chart the development of social shifts, cultural practises, and customs across time. This point of view acknowledges the value of cultural heritage and the contribution of the past to the formation of present-day landscapes. Thirdly, anthropology and cultural studies are used to analyse cultural landscapes. Anthropologists investigate the intangible aspects of culture, such as the ideals, traditions, rituals, and social customs that define the character of a place. This perspective emphasises how symbolic meanings are infused into landscapes and how this influences how social identities are formed. Additionally, indigenous viewpoints may be used to understand the cultural environment. Native American tribes often have strong attachments to their ancestral grounds and see the scenery as a living thing with spiritual and cultural importance. Their worldview incorporates ancient knowledge, spiritual convictions, and ecological practises to provide a complete understanding of the environment.

KEYWORDS:

Countryside, Cultural, Environment, Heritage, Historical.

INTRODUCTION

Although the phrase "cultural landscape" is not new, it still lacks a clear definition. However, the majority of definitions (such as the Florence Convention, the World Heritage criteria, Bennett 1996, Droste, Plachter, and Rössler 1995, and Hajós 1999) embrace the idea of humans and nature interacting, and the Florence definition is the best of all. Perhaps there is no need for additional clarification; beyond that, there are just various points of view and presumptions. We can all cooperate as long as everyone's presumptions are openly stated. As an archaeologist, I am persuaded by education and philosophy that the depth of human activity across time and, more importantly, the presence of the past, are the most significant aspects of the landscape. The majority of other applications of the phrase, in my opinion, tend to neglect how much culture and time depth contribute to the landscape and how much even events that occurred thousands of

years ago can still be read in the terrain. This appears particularly true if a region's appeal hinges on a seemingly picturesque A timeless (although often relatively recent), threatened (and hence not menacing), and way of life is preferred. The term "traditional" is often used to refer to these lifestyles as a shorthand for a number of potent yet harmful Myths like peace with nature, the noble barbarian (or at least the dignified peasant), and even Edens (potential World Heritage Sites) are at the core of the romantic perspective of cultural landscape.

These myths romanticise antiquated, mostly rural lifestyles that are all but utterly unsustainable today. By doing so, they discourage genuine interaction with the cultural landscape as the historical aspect of the physical environment. Landscapes that have undergone significant alteration may be excluded under the emotional interpretation of cultural landscape. Because they lack harmony, they are seen as being damaged or abnormal. Such landscapes contain some of the greatest illustrations of cultural landscapes, those that most obviously reflect human connection with nature, in fact (at least in my reality). It would seem that "good" landscapes deserving of the World Heritage List are produced by exactly the right amount of cultural engagement, whereas landscapes in need of redevelopment are produced by too much. This is just another aspect of the enough-ness problem. When has a landscape undergone enough transformation to become unworthy of maintenance? When did a landscape become worthy of preservation due to adequate survival? If art historical qualities are prioritized above historic relevance, the similar issue occurs in the appraisal of historic structures [1], [2].

Even if the adjustments reflect historical and societal changes, the phrase "It is too altered to be listed" is sometimes used in England in reference to a structure that has been altered from the architect's original purpose. This disregards the adage that a structure is never done, simply begun. Furthermore, it is occasionally feasible to determine a building's architect's goal; in contrast, there is seldom a known beginning point for a landscape, making the quest for the pristine seem even more fruitless. This viewpoint has undoubtedly been exaggerated a little, but not to the point of caricature. It is an ahistorical vision, and in order to remedy it, the study and maintenance of cultural landscapes need a solid archaeological foundation. In any case, using archaeology is crucial because so much of the story of the landscape was never recorded in historical sources, even during "historic" periods. Archaeology is most broadly defined as a set of theory and methods for reading material culture, whether deposits, buildings, artefacts, or the landscape. But it's also essential because archaeologists contribute a knowledge of deep time and long-term processes to cultural landscapes. Typically, the cultural landscape is seen in terms of location and space. The raw materials for archaeological practise are time and history, variety (the young and the elderly, the majestic and the mundane, the broad and the localised), and process (creation and change), but these are really its main dimensions (Fairclough 1999b) [2], [3].

DISCUSSION

The need for archaeological perspectives on the landscape prompted the establishment by English Heritage of the Historic Landscape Characterisation (HLC) program. The ideas that underpinned this were developed in parallel with the work on sustainability and integration described above. One of the first steps was a research program in 1993-94 to review the philosophy and theory of landscape conservation and current methods of studying historic landscape. It proposed a methodology of assessment and characterization at county scale, borrowing some techniques from landscape architects (Countryside Commission 1993). Its

conclusions, and a description of the first years of implementation, were published as Yesterday's World, Tomorrow's Landscape, a title chosen to emphasize that landscape conservation is concerned with managing change and looking forward (Fairclough, Lambrick, and McNab 1999). This project was supported by English Heritage's simultaneous collaboration with the Countryside Commission, the national agency responsible at that time for landscape preservation. We helped the Countryside Commission to write Views from the Past, their statement on the historic dimension of the landscape (Countryside Commission 1994, 1996). We were also involved with the Countryside Commission s Countryside Character Map project and English Nature's Natural Areas equivalent. This produced a national map as the basis for starting to take decisions about the direction of future change [4], [5]. It divided England into 159 discrete areas (Countryside Agency 1999; Countryside Commission 1998), each characterized at the national scale in terms of scenic, natural, and historic attributes. Further work is now adding a more detailed layer, with more than 2,100 subareas, sharing about 75 types, moving closer to the level of detail that HLC uses.

Figure 1: Progress with national program of countybased HL C projects as of December 2002 drawn by Vince Griffin, English Heritage [getty].

Successful integration, however, requires each component to be firmly grounded before it can be integrated with others. In addition to joint work, therefore, English Heritage carried out its own

separate work on landscape, as it had on sustainability, and for the same reasons. This separate work produced an atlas with a national perspective similar to the Countryside Character Map, and created Historic Landscape Characterisation to be carried out at the county level. The Atlas includes a "character area"-based assessment of the whole country, using the pattern of historic settlement (Roberts and Wrathmell 2000). Although based on mid-nineteenth-century maps and census data, the patterns revealed in the Atlas (three large provinces with twenty-eight subprovinces) are proving to be of very early origin, and recognizable in the landscape's overall pattern for more than one thousand years. The work formed part of English Heritage's Monuments Protection Programme, which carries out national thematic evaluations of archaeology and the historic environment as the basis for managing change or designation [6], [7]. The Atlas therefore has a number of benefits: it is a serious research tool (a companion synoptic volume has since been published.

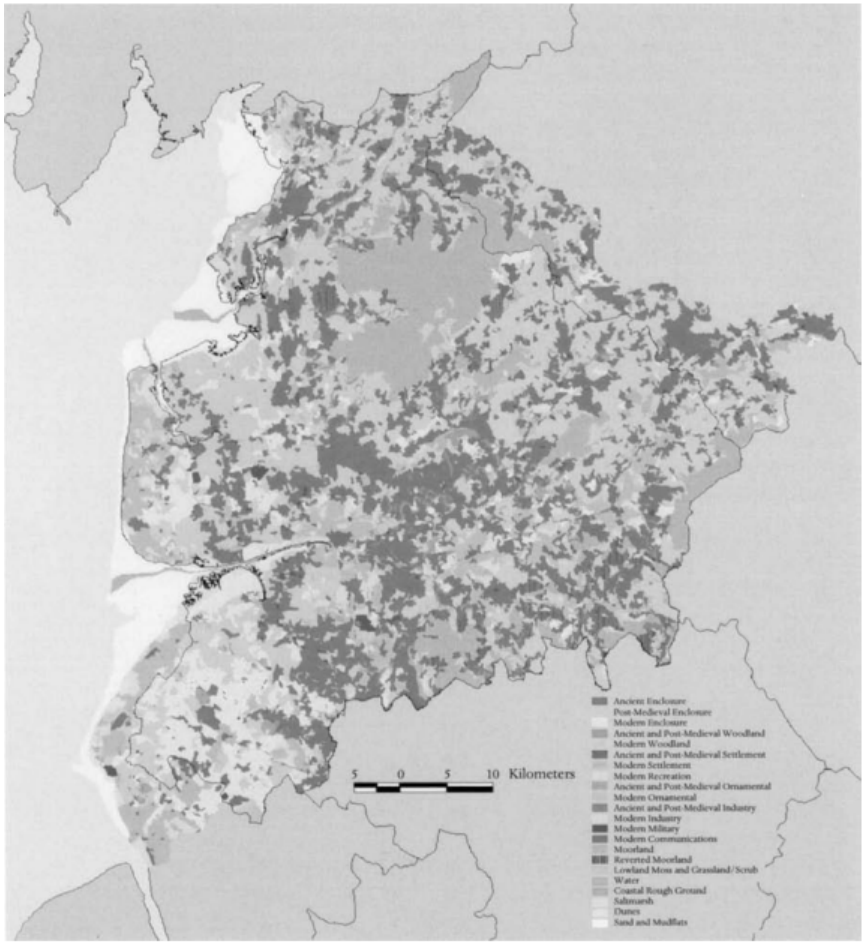

Figure 2: Lancashire HLC Geographic Information System printout using a "Broad Types" classification, an entry level to the GIS. Produced by Joy Ede and John Darlington; English Heritage/Lancashire County Council [getty].

For the first time in England, H LC develops a thorough perspective on the archaeological, historic, and cultural significance of every county's landscape (see Figure 2, Colour Plate 1). It represents a fresh, if preliminary, knowledge of the historical and archaeological components of

the whole contemporary environment. The maps also have the advantage of drawing attention to the too often ignored or disregarded terrain of the last several centuries. H LC maps, which represent current snapshots of the nature of the terrain and human response to it, will also serve as benchmarks for gauging future change. Similar to the Atlas, HLC fulfils a variety of functions (see Herring 1998, Fairclough 1998, Fairclough 2002, Fairclough, Lamb rick, and Hopkins 2002, and individual HLC project reports) [7], [8].

British method. HLC is therefore a key element of historic environment protection and spatial planning, together with other levels of the SMRs. It produces a stand-alone landscape evaluation that is entirely devoted to the archaeological and historical features of the environment. However, it does so in a manner that, for the first time, enables the historical and archaeological appreciation of the landscape to be properly integrated with other scenic assessments to create useful landscape assessments and action plans (for example, Lancashire's Landscape Strategy [Lancashire County Council 2001) [9].

CONCLUSION

In order to extend effective preservation and management from individual sites to the larger landscape, the Historic Landscape Characterisation programme in England was formed to give knowledge of the cultural landscape and to promote awareness of its richness. It summarises many of the topics covered in this chapter as a result. It combines the justifications for striving to control change extensively throughout the whole historic environment and for implementing sustainability principles. One of HLC's primary goals is to assist with the management of change.

This is accomplished by providing the knowledge necessary for conservation, by enhancing and confirming existing SMR and other data, by generating new data about the landscape, and, most importantly, by improving understanding of the historical aspect of the landscape in order to assess current needs. In order to evaluate all facets of the landscape and environment collectively, supporting rather than competing with one another, it also helps to integrate cultural interests with other sorts of environmental care. The spatial planning system, which involves creating development plans and exercising local development control via regulating planning approval, is the main setting for employing HLC. However, it also has an impact on other areas, such as hedgerow protection orders, landscape enhancement strategies, and agri-environmental programmes that are gradually changing the Common Agricultural Policy of the European Union from supply-led farm support to delivering environmental benefits through incentives to farmers. To guarantee that choices are made in these and other areas of change management, knowledge and awareness are necessary (Fairclough and Rippon . As a result of its growing popularity, HLC is emerging as a key delivery method for controlling change and preserving the historic environment. It offers fresh data for heritage management to influence agricultural and landscape policy, and it establishes a common platform for people to participate in the discussion about the future of the landscape. It will assist us in figuring out how to transmit a historically significant and culturally significant landscape while also leaving behind enough for our descendants to choose the kind of environment they want to live in. Therefore, HLC or comparable approaches to comprehending and regulating the cultural landscape have to be a crucial part of sustainable development. The idea's popularity outside of England indicates that it will contribute to the European Landscape Convention's driving factors [10], [11].

REFERENCES

[1] S. Carver, "Rewilding... conservation and conflict," Ecos, 2016.

[2] E. Navickienė, "Context as a creative toolkit for architectural design: Perspectives of management and sustainable development of urban heritage," Creat. Stud., 2020, doi: 10.3846/cs.2020.11666.

[3] V. Tekken et al., "'Things are different now': Farmer perceptions of cultural ecosystem services of traditional rice landscapes in Vietnam and the Philippines," Ecosyst. Serv., 2017, doi: 10.1016/j.ecoser.2017.04.010.

[4] O. Englund, G. Berndes, and C. Cederberg, "How to analyse ecosystem services in landscapes—A systematic review," Ecological Indicators. 2017. doi: 10.1016/j.ecolind.2016.10.009.

[5] S. Sacchelli and M. Favaro, "A virtual-reality and soundscape-based approach for assessment and management of cultural ecosystem services in urban forest," Forests, 2019, doi: 10.3390/f10090731.

[6] R. Z. Melnick, "Deciphering cultural landscape heritage in the time of climate change," Landsc. J., 2016, doi: 10.3368/lj.35.2.287.

[7] F. Nocca and L. Fusco Girard, "Towards an integrated evaluation approach for cultural urban landscape conservation/regeneration," Region, 2018, doi: 10.18335/region.v5i1.160.

[8] B. Prus, M. Wilkosz-Mamcarczyk, and T. Salata, "Landmarks as cultural heritage assets affecting the distribution of settlements in rural areas-an analysis based on LIDAR DTM, digital photographs, and historical maps," Remote Sens., 2020, doi: 10.3390/rs12111778.

[9] I. Eliasson, I. Knez, and S. Fredholm, "Heritage Planning in Practice and the Role of Cultural Ecosystem Services," Herit. Soc., 2018, doi: 10.1080/2159032X.2019.1576428.

[10] E. Zaras-Januszkiewicz, J. Botwina, B. Zarska, T. Swoczyna, and T. Krupa, "Fortresses as specific areas of urban greenery defining the uniqueness of the urban cultural landscape: Warsaw fortress-a case study," Sustain., 2020, doi: 10.3390/su12031043.

[11] J. Caywood, "Everyday America: Cultural Landscape Studies After J. B. Jackson," Public Hist., 2004, doi: 10.1525/tph.2004.26.1.157.

CHAPTER 5

SOCIAL SUSTAINABILITY: PEOPLE, HISTORY AND VALUES

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ABSTRACT:

The protection of people's rights, equality, and cultural values is a key component of social sustainability, which includes the wellbeing of individuals, communities, and societies. In exploring the many facets of social sustainability, this abstract places special emphasis on the role that people, history, and values have in fostering socially sustainable surroundings.First of all, social sustainability prioritises the needs of individuals. It emphasises the significance of addressing fundamental human needs, advancing social justice, and guaranteeing equitable access to opportunities and resources. Social sustainability seeks to improve quality of life and promote inclusive societies by tackling problems including poverty, inequality, and social exclusion Second, history is essential to the maintenance of society. For the purpose of resolving current issues and determining the course of the future, it is crucial to comprehend the historical background and the legacy of previous social processes. Understanding the social structures, cultural norms, and systemic problems that have defined societies via historical views allows for informed decision-making and the preservation of cultural heritage Thirdly, cultural values have a close relationship with social sustainability. It recognises the relevance of many cultural traditions, identities, and values in fostering communities that are strong and resilient. Respecting indigenous knowledge, valuing cultural variety, and fostering intercultural conversation all help to maintain societal harmony and make it possible for many cultural viewpoints to coexist in a way that is sustainable. Additionally, decision-making mechanisms that include people and communities are necessary for social sustainability. People feel more ownership, their social ties are strengthened, and communities as a whole are better off when given the opportunity to shape their own settings. For results to be socially sustainable, collaborative governance and inclusive planning procedures are essential.

KEYWORDS:

Communities, Ecosystems, Historical, Variety, Sustainability.

INTRODUCTION

My interest in social sustainability stems from both personal and professional observations on how the built environment affects how we define ourselves as both people and as a society. However, in order to address these issues, I must change the analytical emphasis from economic and cultural landscapes to personal histories, wants, and values. I also need to concentrate on how we may preserve the social relationships and meanings that underpin our complex social system. I start with my own studies and experiences. runs through locations, organisations, and cultural landmarks that bear the imprint of my own past as I travel from Palm Springs to West Los Angeles. I am brought back to my college campus, the summers I spent there as a youngster,

and my first job. Although we are rarely aware of it, these physical cues give us a sense of place attachment, continuity, and connectedness that is important for our psychological growth as individuals as well as for our "place identity" or "cultural identity" as families or ethnic or cultural groups (Low and Altman 1992). But what happens if your whereabouts are not identified, or even worse, if your personal or cultural past is excluded from historical records and physically destroyed? A prime example of the erasing of a working-class and poor people's history is seen in the nineteenth-century renovation of Paris by Baron Haussmann and the demolition of houses around Notre Dame (Halloran 1998). We have been more tactful in the United States. For instance, Robert Moses destroyed entire working-class neighbourhoods in order to build the Cross-Bronx Motorway in New York City, and the contextually intricate, residential streets of Bunker Hill were lost in the modernist redevelopment of downtown Los Angeles (Louksitou-Sideris and Dansbury 1995–1996). In Philadelphia's Independence National Historical Park, there is no documentation of the African Americans who constructed the structures, the Jews who provided the funds for the Revolution, or the women, mothers, and spouses who provided the troops' food. The colonial era was recreated as a white, male place via the historical preservation, planning and development, and park interpretation procedures.

The history of minority peoples throughout colonial periods lack even the recording of destroyed structures and the surrounding physical environment. However, African Americans in Philadelphia are working to reclaim their history by funding studies and establishing archives to make sure that their Sites of historical and cultural significance are covered. While the African American community in New York successfully disputed the federal government's claims to the African American Burying Ground and demanded its recognition and preservation, it had less success in securing the Audubon Center's protection. Malcolm X was shot in a ballroom. while a result, history is re-searched and rediscovered even while they are being destroyed so that it may be remembered. Ellis Island is inaccessible to inhabitants of the nearby neighbourhoods while being barely 400 metres off the New Jersey coastline. The expense of the boat voyage is exorbitant due to their lack of financial resources, particularly for excursions with extended families. Residents want a bridge to connect Ellis Island to Liberty State Park so that their neighbourhood may have free access, while historic preservationists claim that it would ruin tourists' experiences of coming by boat. These types of conservation and historic site issues are often caused by conflicting values resulting from various societal demands and presumptions, but they may be overcome by having a greater knowledge of those values and what they represent to the local inhabitants. I discuss the issue of how to strengthen the social sustainability of historic places by incorporating competing cultural values and various cultural histories [1]–[4].

DISCUSSION

What does the term "social sustainability" mean? Sustainability, according to Throsby (1995), is concerned with a system's potential to self-generate or self-perpetuate, avoid short-term or temporary fixes, and be evolutionary or long-lasting in nature. Comparing "cultural ecosystems" to "natural ecosystems," which sustain and preserve the "natural balance," Throsby (1999) argues that "cultural ecosystems" do the same for cultural life and human civilization. While culturally sustainable development refers to the preservation of the arts and society's attitudes, practises, and beliefs, sustainable development is the preservation and improvement of the environment via the maintenance of natural ecosystems. A subcategory of cultural sustainability, social sustainability is the preservation of social relationships and meanings that support cultural

systems. It specifically means preserving and promoting the many histories, values, and connections of modern communities. I need to add three crucial elements to Throsby's approach in order to comprehend social sustainability at the level of both people and groups:

1. Cultural ecosystems are situated in both time and space; in order to sustain or protect a cultural ecosystem, its location(s) must be preserved (Low 1987). Place preservation is necessary for sustainability and cultural conservation. When discussing the physical environment and concerns of cultural representation at historic sites, this seemingly simple fact is significant.
2. Anthropologists use a range of hypotheses to explain how cultural ecosystems function in specific locations across time. For instance, anthropologists have established cultural evolutionary theories to forecast settlement patterns and sociocultural development in the third world and have examined the ecological dynamics of natural systems to comprehend sociopolitical changes in the cultural ecosystems of farmers. several these cultural Ecology theories have been criticised historically, yet cultural ecosystem models' dynamic and predicting features are still helpful. while investigating social development in a specific location.

This argument is best shown by the historic Parque Central in San José, Costa Rica. Up until 1992, Parque Central was a firmly established, spatially organised, cultural ecosystem with shoe shiners on the northeast corner, pensioners on the southwest corner, vendors and religious practitioners on the northwest corner, and prostitutes and labourers on the inner circle in the middle. To eliminate users seen to be unappealing to visitors and the middle class, the municipality closed the park and reconfigured the historic area in 1993, disrupting the existing cultural environment (Low 2000). The "natural balance" was broken by the remodelling. On Sunday, young Nicaraguans, not Costa Ricans, predominated in the area as a new social group, a gang of young males, gained control, making the area even more unsafe and unwelcoming. The fragility of current cultural ecosystems and their variety of niches is shown by this scenario; if the sociospatial niches (places) are removed, the system may not be able to sustain itself [5], [6].

Cultural diversity is the third crucial factor. Cultural variety is the social equivalent of biodiversity, which is vital to the physical environment as a genetic storehouse and reservoir of adaptive evolutionary methods. In the United States, cultural diversity rose to "politically correct" status in the 1980s, but it hasn't been taken into account in planning, much less sustainable development. Although conserving cultural variety is a conceptual objective of sustainable development, there is little consensus and much less study on what it really entails. However, cultural variety offers a means of assessing the viability of social and cultural systems. For instance, I have spent the last 10 years researching the cultural usage patterns of historic sites and major urban parks. The Public Space study Group has created a set of guiding principles based on this study that promote, uphold, and preserve cultural diversity and, in my opinion, societal sustainability (Low et al. 2002). These guidelines are comparable to William H. Whyte's regulations for compact cities that support social viability, except in this instance, the regulations support and/or preserve cultural variety [7]. They have the following instructions, among others:

1. People won't visit historical national parks and monuments if they are not shown, and more importantly, if their histories are lost.

2. Circulation and mobility are important components of access, but so are economics and cultural use patterns in parks. Accessibility for all socioeconomic groups must thus take into account income and visitor patterns.
3. By creating "territories" for each person inside the wider site area, it is possible to sustain and improve the social interaction of various groups.
4. In order to make choices that result in maintaining cultural and socioeconomic variety, it is crucial to take into account the variations in how different social classes and ethnic groups utilise and value public spaces.
5. Modern historic preservation shouldn't only focus on restoring the park's visual characteristics; it should also focus on restoring the amenities and attractions that draw visitors.
6. One crucial aspect of place attachment that may be encouraged to support cultural diversity is symbolic means of conveying cultural significance.
7. A big site may be planned and maintained to provide areas that support neighbourhood community life and activity while also offering unique places and events to draw people from a variety of cultural backgrounds from a wider geographic region.

These social sustainability guidelines for urban parks and historic locations are just the start. To fully comprehend the value of and challenges associated with sustaining cultural variety, further study is necessary. But at the very least, they show how cultural variety may be a crucial factor in determining whether a cultural ecology is successful. Cultural Diversity is one apparent result of human group continuity in culturally relevant locations an essential component of social sustainability. This updated model of cultural ecosystem variety and sustainability offers a strong theoretical foundation for defining social sustainability. However, social sustainability goes beyond knowledge of cultural variety and ecosystems. It suggests a moral and political posture towards sociocultural structures, one that maintains, supports, and, in some situations, enhances them. And in this regard, a fresh set of inquiries are necessary. Are all populations competent to practise social sustainability? Human ecosystems compete with one another, despite our presumption that they don't. One cultural system may supplant another if it is effective. Is this what we mean by sustainability, the survival of the fittest based on an evolutionary or sociobiological paradigm, and natural selection of cultural ecosystems? Or should we defend lesser systems, organisations, and urban niches against more powerful ones? Who exactly are "we"? In our talks of application and practise, we must confront these moral and political issues. But for the time being, I'll presume that "we" refers to conservationists and social scientists who are engaged in site studies and that our objective is to preserve cultural groups who are present at or close to a historic site and who value it.

In the end, we must deal with concerns of social sustainability at several levels: local, regional, and global. The examples I've given so far demonstrate social sustainability at the local level, which is knowing a place's cultural dynamics such that particular people and their histories and values are preserved at or close to the historical location, over generations, across time. A regional plan that supports not only individuals but also neighbourhoods, communities, churches, associations, and the institutional infrastructure necessary for the survival of cultural values and geographic locations of larger groups throughout history may help to better conceptualise social

sustainability at the regional level. Dolores Hayden's 1995 book Power of Place offers a vision for preserving and honouring the cultural traditions of minorities and women that transcend local boundaries and support more fundamental facets of society. With David Throsby's "sustainable development" based on intergenerational, and, I would add, cultural, equitable, and environmental justice, social sustainability at the global level advances closer to where we started. But this topic is covered by other works. As an alternative, I'd want to propose a study methodology called Rapid Ethnographic Assessment Procedures (REAPs), which may be used to include many cultural histories and values and improve social sustainability at the local level. I provide the examples of Independence National Historical Park and Ellis Island to show how REAPs may be used to improve the social sustainability of a place by assisting us in understanding its histories, values, and connections [8]–[10].

CONCLUSION

Social sustainability acknowledges that people, history, and beliefs play a crucial role in establishing prosperous and just communities. Social sustainability prioritises the health of people and communities in order to solve challenges of poverty, injustice, and social exclusion. It also works to create inclusive settings where everyone has access to the same opportunities and rights. Addressing current issues and determining future course depend much on understanding historical background. Societies may manage social structures, cultural norms, and systemic difficulties by acknowledging the past and learning from it. In doing so, they can make choices and take actions that are well-informed and respectful of historical legacies. Social sustainability depends on variety of values and cultural perspectives. Respecting indigenous knowledge and embracing varied cultural traditions, identities, and values strengthens social cohesiveness and advances intercultural communication. It enhances social ties and fosters a feeling of belonging by enabling the presence of various viewpoints within a robust framework. Social sustainability requires inclusive decision-making and participatory procedures. Social sustainability promotes ownership, improves social links, and generates a feeling of responsibility and involvement by enabling people and communities to actively shape their own surroundings. Promoting social sustainability requires both education and awareness. Societies may increase public understanding of social concerns, human rights, and environmentally friendly practises via education. Education enables people to make constructive contributions to their communities and strive towards social sustainability by fostering a culture of social responsibility and active citizenship. In conclusion, social sustainability acknowledges the role of individuals, history, and values in establishing inclusive and just communities. Societies may work towards social sustainability through prioritising well-being, comprehending historical circumstances, accepting cultural variety, cultivating participation, and promoting education and awareness. The ultimate objective is to establish conditions that put everyone's dignity, rights, and ability to thrive first in order to provide a decent and sustainable future for future generations.

REFERENCES

[1] E. Eizenberg and Y. Jabareen, “Social sustainability: A new conceptual framework,” Sustain., 2017, doi: 10.3390/su9010068.

[2] G. Schönborn, C. Berlin, M. Pinzone, C. Hanisch, K. Georgoulias, and M. Lanz, “Why social sustainability counts: The impact of corporate social sustainability culture on financial success,” Sustain. Prod. Consum., 2019, doi: 10.1016/j.spc.2018.08.008.

[3] V. Nath and R. Agrawal, “Agility and lean practices as antecedents of supply chain social sustainability,” Int. J. Oper. Prod. Manag., 2020, doi: 10.1108/IJOPM-09-2019-0642.

[4] V. G. Venkatesh, K. Kang, B. Wang, R. Y. Zhong, and A. Zhang, “System architecture for blockchain based transparency of supply chain social sustainability,” Robot. Comput. Integr. Manuf., 2020, doi: 10.1016/j.rcim.2019.101896.

[5] E. Segerstedt and L. Abrahamsson, “Diversity of livelihoods and social sustainability in established mining communities,” Extractive Industries and Society. 2019. doi: 10.1016/j.exis.2019.03.008.

[6] M. R. Shirazi and R. Keivani, “The triad of social sustainability: Defining and measuring social sustainability of urban neighbourhoods,” Urban Res. Pract., 2019, doi: 10.1080/17535069.2018.1469039.

[7] A. Kumar and R. Anbanandam, “Development of social sustainability index for freight transportation system,” J. Clean. Prod., 2019, doi: 10.1016/j.jclepro.2018.10.353.

[8] J. Sarkis, M. M. Helms, and A. A. Hervani, “Reverse logistics and social sustainability,” Corp. Soc. Responsib. Environ. Manag., 2010, doi: 10.1002/csr.220.

[9] V. Roca-Puig, “The circular path of social sustainability: An empirical analysis,” J. Clean. Prod., 2019, doi: 10.1016/j.jclepro.2018.12.078.

[10] S. Ceylan and M. D. Soygeniş, “A design studio experience: impacts of social sustainability,” Archnet-IJAR, 2019, doi: 10.1108/ARCH-02-2019-0034.

CHAPTER 6

RAPID ETHNOGRAPHIC ASSESSMENT PROCEDURES

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ABSTRACT:

Rapid anthropological Assessment Procedures (REAP) is a study methodology that combines anthropological methods with a quick, flexible approach to learn about cultural practises, beliefs, and social dynamics. An overview of REAP, its essential elements, and its applicability in many disciplines are given in this abstract. REAP is designed to quickly and precisely gather the most important data on a particular culture or group. It makes use of a number of expedited ethnographic data collecting methods, including participant observation, interviews, and document analysis. The approach may be used in a variety of contexts, including healthcare, community development, disaster response, and programme assessment. It tries to provide a picture of the cultural environment. Pre-fieldwork planning, quick data collection, data processing, and the generation of useful insights are the main REAP components. Creating research topics, identifying important informants, and choosing the best data collecting methods are all part of the pre-fieldwork preparation process. Rapid data collection entails intense fieldwork carried out over a short time with sometimes numerous researchers. Data analysis involves combining and analysing the gathered data to find trends, themes, and cultural insights. Producing actionable insights, the last phase, is presenting results in a clear and understandable way to guide decision-making and action.

KEYWORDS:

Data, Ethnographic, Interviews, Reap.

INTRODUCTION

Rapid Ethnographic Assessment Procedures are designed to offer ethnographic data on local people so that planners may "evaluate alternatives and assess planning impacts on ethnographic resources and associated user groups" (National Park Service 2000). The people connected to parks, their cultural practises, and the surrounding places, buildings, materials, and natural resources are all the subject of ethnography. Expressive components of cultural and ethnic systems that commemorate or preserve important occasions often have great emotional and symbolic significance for local cultural groups (National Park Service 2000). In order to better understand the long-standing relationships between specific parklands and western Native American populations, the National Park Service (NPS) initially used ethnographic study. Native Americans or other local communities depend on these places for their continuing cultural identity and existence since they include natural resources and, in the case of artefacts and buildings, cultural resources. These areas are referred to as "ethnographic resources" by the NPS, and the inhabitants who live there are known as "traditional" or "park-associated" peoples. Applied ethnographic research aims to improve relationships between park management and

local communities whose histories and connections to park cultural resources are unknown or poorly understood by providing systematic data on local lifeways. The NPS shares authority in several of the nation's newest national parks with other federal agencies, state and local governments, including Indian tribes or other groups with unique cultural practises. Ethnographic study with impacted communities is particularly beneficial because of the complexity of planning tasks that results from it (Mitchell 1987) [1], [2].

The literature lists several advantages of doing ethnographic research. One is in the field of conflict management, when local populations expect negative effects from the designation of new parks or historic sites or from modifications to already existing parks. According to Wolf (1987), ethnographic research helped build bridges amongst neighbours throughout the challenging process of creating a National Historic Park around locations in Atlanta connected to the life of Martin Luther King Jr. Management was able to find viable compromises and mitigation actions with the use of ethnographic information (Wolf 1987). A certain amount of legitimacy may be added to agency decision-making via the process of ethnographic study with communities with unique cultural practises that are impacted by building projects (Liebow 1987). The development of links between authorities and regional neighbourhood and cultural organisations, who would not otherwise have a role in the planning process, is another advantage of community empowerment.

According to Joseph (1997), the applied ethnographic research conducted by the NPS is highly collaborative, including participation from elected officials, park administrators, as well as regular individuals and community leaders. I have argued that increased communication between the community and the governing body might avert the majority of preservation issues in cultural landscapes, including vandalism, underuse, and neglect. The presentation and representation of the cultural history of local populations into the overall programming of site resources is a third significant advantage of ethnographic research. Information from ethnographies is helpful. in presentation, especially for historical sites like Minuteman in Massachusetts that include a living community.

Within the historic context that the park maintains and interprets, Minuteman has made an effort to revive and conserve farming as a traditional cultural practise. The proper administration of a centuries-old practise may depend on information that can only be discovered via ethnography, such as the gendered distribution of labour on family farms. When it comes to the display of historic items, ethnographic data collected from current members of the related cultural group might disclose uses and meanings not immediately obvious from the objects themselves. According to Low, the majority of cultural landscapes are described primarily in terms of their historical rather than present-day significance to the community, giving historical meanings precedence over those of the geographically and/or culturally related populations. This omission often leads to conflict and local disputes that may be resolved using the information generated by a REAP. Without the collaboration of the local community, social sustainability of these places cannot be maintained, hence it is important to meet their needs and values while still maintaining the historical significance of the cultural site [3]–[5].

DISCUSSION

In a REAP, many techniques are chosen to generate various sorts of data from various sources, which may then be triangulated to provide a thorough study of the location. Below is a quick explanation of each technique. For an overview of each project's output and product, see Table 1.

1. Historical and Archival Documents.

The REAP process starts with the gathering of historical records and the examination of pertinent archives, newspapers, and periodicals. This technique may be rather time-consuming for historically important places, particularly if secondary sources are lacking. Since areas of collaboration and conflict often become obvious and recognizable via a detailed knowledge of the history of the location, this technique of data collecting is crucial.

2. Mapping of Physical Traces.

Physical traces maps document the locations of spirits bottles, needles, rubbish, clothes, plant erosion, and other human activity remnants. Based on information gathered at each location early in the morning, these maps are finished. Records of tangible signs of human presence and activity provide hints about what occurs at these locations at night. Physical traces mapping presupposes the availability of a foundation map of resources and fundamental characteristics that may be in order to find the physical remnants.

Table 1: Display the REAP Methodology.

Method	Data	Product	What Can Be Learned
Historical and archival documents	Newspaper clippings, collection of books and articles, reading notes	History of the site's relationship to the surrounding communities	Provides historical context for current study and planning process
Physical traces mapping	Collected trash, patterns of erosion	Description of nighttime activities on site	Identifies evening activities not observed
Behavioral maps	Time-space maps of sites	Description of daily activities on sites	Identifies cultural activities on site
Transect walks	Transcribed interviews and consultant's map of site	Description of site from community member's point of view	Community-centered understanding of the site; local meaning
Individual interviews	Interview sheets	Description of responses of cultural groups	Community responses and interest in site
Expert interviews	Transcription of in-depth interviews	Description of responses of local institutions and community leaders	Community leaders' interest in site planning process
Impromptu group interviews	Transcription of meeting	Description of group perspective, educational value	Group consensus of issues and problems
Focus groups	Tape recording and transcription of discussion	Description of issues that emerge in small-group discussion	Elicits conflicts and disagreement within cultural group
Participant observation	Field notes	Sociocultural description of the context	Provides context for study and identifies community concerns

Otherwise, making such a map for both the behavioral maps and the physical traces is part of the work [6], [7]. A base map could not be accessible at many archaeological sites, adding an extra step to the research procedure.

3 Behavioral Maps.

Maps of human behaviour keep track of individuals and their behaviours through time and location. These maps organise data in a manner that makes it possible to plan and study the site's design, and they are particularly helpful in getting to know the regular activities at the site and its issues. They work best in small park areas with a diversity of social and economic uses where the researcher may visit the different social places frequently throughout the day.

4. Transect Walks.

A transect walk serves as a record of the descriptions and observations made by a community consultant while leading visitors around the property. One or two community members should be a part of the research team in order to get their perspective on the location. Most REAPs employ local consultants, who serving as the researcher's partners. But since the transect walk approach depends on, this is particularly crucial. the nature of the partnership between the researcher and the collaborator.

5. Individual Interviews.

Interviews with individuals from the indicated demographics are gathered. Each location has a different sample plan, interview schedule, and interview count. In most instances, interviews are conducted with site visitors and nearby locals, however in other circumstances a broader sample of people may be questioned.

6. Expert Interviews.

The head of the vendors' association, neighbourhood association presidents, the head of the planning board, teachers in the local schools, ministers in the local churches, principals in the local schools, and representatives from nearby parks and institutions are among the people who have been identified as having special expertise to comment on the area and its residents and users.

7. Impromptu Group Interviews.

Informally organised meetings with church or school groups or gatherings outside of public spaces are used to conduct group interviews. In contrast to individual interviews or focus groups, group interviews aim to gather data in a group setting while also giving the community an educational opportunity. Open-ended and experimental impromptu group interviews are conducted with anybody from the community who is interested in participating in the discussion group.

8. Focus groups

Focus groups are organised with those who are crucial for comprehending the park location and surrounding community. The focus groups, as opposed to the broad, open group interviews, are made up of six to ten people chosen to represent particularly vulnerable groups, such as schoolchildren, elders, and people with physical disabilities. A facilitator guides the conversations, which are taped and held in the group's language [8], [9]..

9. Participant Watching.

The researchers have field notebooks where they note their observations and feelings about life in the park on a daily basis. Additionally, they document their interactions with people and communities. An important complement to behavioural maps and interviews is participant observation. In order to facilitate correct data interpretation, it gives contextual information and data that may be compared to what is heard and seen.

10. Evaluation.

All replies to the interview questions are coded, and the information is then broken down by cultural-ethnic group and research subject. Maps of each group's cultural resources are produced using transect walks, excursions, and interviews. Focus groups assess the level of societal cultural literacy. and pinpoint the community's points of contention and disagreement. The validity and reliability of data gathered from a very small sample is increased by the separate data sets that may be compared and contrasted that are provided via mapping, transect walks, individual and expert interviews, and focus groups. Interviews, observation, and field notes, like in any ethnographic research, are utilised to assist understand the data gathered, together with knowledge of the cultural group dynamics and local politics.

The data is analyzed using a variety of techniques. The resource maps are first created using an overlay approach that incorporates participant observation notes, physical traces, and behavioral maps. These maps are descriptive in that they list goings-on and interruptions at the location. Second, each participant presents their findings from their interviews in a research conference. These are broad generalizations that serve as a roadmap for the research team (or individual researcher) when they start to craft more specific coding methodologies. This artificial stage offers a starting point for contemplating the findings. Theoretical frameworks are examined and the coding process is prioritized using the "general summaries".

Third, a set of codes are created for each generalization that may be used to examine the field notes. This is followed by a study of the interview questions and the creation of a comparable classification system. The results of the maps, the field notes, and the format of the questions themselves are used to code the interviews.

This takes up the majority of the analysis process' time and necessitates discussions between the research team, the client, and, sometimes, specific stakeholders. Although qualitative content analysis is often sufficient in a REAP, certain coding systems may need multidimensional scaling and a quantitative analysis. Because a REAP is a "rapid" process, there are often less than 150 interviews, making them suitable for manual analysis. A qualitative analysis method has the benefit of preserving the validity and specificity of the facts by not abstracting them from their context. Fourth, the results of the numerous studies are triangulated to reveal commonalities, behavioral patterns, points of contention, and discrepancies in both the group as a whole and the data itself [10], [11].

CONCLUSION

The Rapid Ethnographic Assessment Procedures (REAP) approach has shown to be an effective way to gather crucial cultural information from time-sensitive circumstances. In order to match the need for rapid information with the depth of knowledge attained via anthropological research, REAP provides a time-efficient and adaptable strategy. It does this by adapting classic

ethnographic procedures to a shorter period. The essential characteristics of REAP, such as its success in capturing cultural practises, beliefs, and social dynamics, as well as its adaptability and focus on partnership with local people, all contribute to this. Researchers may acquire useful data using REAP in a variety of industries, including healthcare, community development, disaster response, and programme assessment. The importance of REAP rests in its capacity to assist in decision-making, create interventions that are suited for a certain culture, and help to the creation of inclusive and efficient methods. Research and interventions are more responsive to local beliefs, values, and practises when they are informed by an awareness of the cultural context and include local stakeholders.

In the end, this produces results that are more relevant, significant, and long-lasting. A thorough framework for doing effective and insightful research is provided by the structure and REAP components, which include pre-fieldwork planning, quick data collecting, data analysis, and the generation of actionable insights. This enables researchers to acquire pertinent data, adapt their methodologies to changing contexts, and provide insightful discoveries. A useful method for carrying out quick ethnographic analyses in numerous disciplines is provided by REAP. It is ideal for environments with limited resources and tight deadlines because to its speed, adaptability, and collaborative nature. Using REAP, researchers may obtain contextually pertinent and culturally rich data that can enhance decision-making, result in more focused interventions, and have a beneficial social impact. As there is an increasing demand for timely and relevant insights, REAP is a useful instrument for quickly gathering crucial cultural information.

REFEENCES

[1] D. Griffith, “Immigrants Fleeing A Dying Industry: Applying Rapid Ethnographic Assessment Procedures To The Study Of Tobacco Farmworkers,” NAPA Bull., 2009, doi: 10.1111/j.1556-4797.2009.01017.x.

[2] D. H. Taplin, S. Scheld, and S. M. Low, “Rapid ethnographic assessment in urban parks: A case study of Independence National Historical Park,” Hum. Organ., 2002, doi: 10.17730/humo.61.1.6ayvl8t0aekf8vmy.

[3] S. M. Low, D. H. Taplin, and M. Lamb, “Battery Park City: An ethnographic field study of the community impact of 9/11,” Urban Aff. Rev., 2005, doi: 10.1177/1078087404272304.

[4] S. Ross, “Strategies for Municipal Participatory Governance and Implementing UN-Habitat’s New Urban Agenda: Improving Consultation and Participation in Urban Planning Decision-Making Processes Through Rapid Ethnographic Assessment Procedure,” SSRN Electron. J., 2017, doi: 10.2139/ssrn.3008945.

[5] S. Kodish, N. Aburto, F. Dibari, W. Brieger, S. P. Agostinho, and J. Gittelsohn, “Informing a behavior change communication strategy: Formative research findings from the scaling up nutrition movement in Mozambique,” Food Nutr. Bull., 2015, doi: 10.1177/0379572115598447.

[6] S. Maria Silene da, A. Angelo Roberto, B. Josemar Sena, and M. Clarice Novaes da, “Plantas medicinais usadas nos dist{ú}rbios do trato gastrintestinal no povoado Col{ô}nia Treze, Lagarto, SE, Brasil,” Acta Bot. Brasilica, 2006.

[7] J. J. Saleem et al., "Understanding barriers and facilitators to the use of Clinical Information Systems for intensive care units and Anesthesia Record Keeping: A rapid ethnography," Int. J. Med. Inform., 2015, doi: 10.1016/j.ijmedinf.2015.03.006.

[8] M. S. Da Silva, A. R. Antoniolli, J. S. Batista, and C. N. Da Mota, "Plantas medicinais usadas nos distúrbios do trato gastrintestinal no povoado Colônia Treze, Lagarto, SE, Brasil," Acta Bot. Brasilica, 2006, doi: 10.1590/S0102-33062006000400007.

[9] K. M. Carley, M. W. Bigrigg, and B. Diallo, "Data-to-model: A mixed initiative approach for rapid ethnographic assessment," Comput. Math. Organ. Theory, 2012, doi: 10.1007/s10588-012-9125-y.

[10] W. A. Tol, I. H. Komproe, M. J. D. Jordans, D. Susanty, and J. T. V. M. De Jong, "Developing a function impairment measure for children affected by political violence: A mixed methods approach in Indonesia," Int. J. Qual. Heal. Care, 2011, doi: 10.1093/intqhc/mzr032.

[11] S. Kodish, N. Aburto, M. N. Hambayi, C. Kennedy, and J. Gittelsohn, "Identifying the sociocultural barriers and facilitating factors to nutrition-related behavior change: Formative research for a stunting prevention program in Ntchisi, Malawi," Food Nutr. Bull., 2015, doi: 10.1177/0379572115586784.

CHAPTER 7

RAPID ETHNOGRAPHIC ASSESSMENT PROCEDURES FOR HERITAGE CONSERVATION SITES

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ABSTRACT:

Rapid Ethnographic Assessment Procedures have become a useful research approach for doing in-depth evaluations of cultural heritage conservation sites in a fast manner. This abstract emphasises the use of REAP in the context of heritage conservation, emphasising its essential elements and advantages for comprehending the cultural relevance, social aspects, and community dynamics of historic places. Archaeological sites, historic structures, cultural landscapes, and traditional villages are just a few of the locations that fall under the category of heritage conservation sites. For successful conservation efforts that take into account the needs, values, and ambitions of local populations, an understanding of the social and cultural components of these places is vital. The REAP framework offers a method for carrying out quick analyses that record crucial cultural insights within the special context of historic conservation sites. The approach combines anthropological methods with time-sensitive conservation initiatives, including participant observation, interviews, and document analysis. Pre-fieldwork planning, swift data collection, data analysis, and the generation of useable insights are the main REAP for historic conservation sites components. Understanding the historical and cultural context of the place, identifying important stakeholders, and creating research questions are all part of pre-fieldwork preparation. In order to record people's experiences, memories, and impressions of the historic site, rapid data gathering entails interacting with the community, making on-site observations, and conducting interviews with relevant parties. Data analysis comprises combining and evaluating the information gathered, spotting trends, and investigating the social and cultural factors that affect the value of the place. Findings must be presented in a way that supports conservation planning, community involvement, and decision-making in order to provide actionable insights.

KEYWORDS:

Community, Conservation, Heritage, Insights, Reap.

INTRODUCTION

Cultural and historical significance may be found in heritage conservation sites, which include archaeological sites, ancient structures, natural landscapes, and traditional communities. A thorough knowledge of these sites' social and cultural contexts is necessary for their preservation and management, as is effective community outreach. In the context of heritage conservation, Rapid Ethnographic Assessment Procedures have become a useful research approach for carrying out quick and informative evaluations. This introduction gives a general overview of how REAP is used at historic conservation sites, emphasising its significance, major goals, and

the difficulties it solves. It also lays the groundwork for comprehending REAP's fundamental elements and advantages in obtaining crucial cultural insights for time-sensitive heritage conservation efforts [1].

The Significance of heritage preservation

The preservation of our cultural and historical inheritance depends heavily on heritage conservation. These locations are significant archival places for knowledge, customs, and communal memory in addition to having aesthetic significance. The development of contextually appropriate solutions that respect and include local populations depends on an understanding of the social and cultural aspects of historic sites [2].

Important Goals of REAP in Heritage Conservation: The use of REAP in heritage conservation strives to accomplish a number of important goals. First and foremost, it aims to elucidate and record the social value of historic places, taking into account the interactions between people and the site, cultural customs, and intangible heritage connected to the location. In order to ensure that local people' voices are heard and their views are included into conservation plans, REAP also places a strong emphasis on including local communities in the assessment process. Thirdly, REAP aids in the early detection of any conflicts or difficulties that can occur throughout the conservation process, allowing proactive steps to resolve them and advance sustainable development [3].

REAP has overcome obstacles in heritage conservation.

Time and resource restrictions, as well as the need to balance preservation and development, are frequent obstacles for heritage conservation efforts. These difficulties may make it more difficult for local populations to participate in meaningful ways and get a thorough awareness of their cultural environment. In order to overcome these difficulties, REAP provides a quick and adaptable technique that, while working within the restrictions of historic restoration initiatives, collects crucial cultural insights. Researchers and practitioners may get important insights that guide decision-making, community participation, and conservation planning by using REAP in the context of historic conservation. The fundamental elements of REAP pre-fieldwork planning, quick data gathering, data analysis, and the generation of actionable insights provide a thorough framework for carrying out effective and informative assessments.

To comprehend the social and cultural aspects of historic conservation sites, the use of Rapid Ethnographic Assessment Procedures is crucial. The REAP programme tackles the problems of time pressures, resource shortages, and community involvement, enabling timely and significant insights that guide conservation activities. The fundamental elements and advantages of REAP in collecting crucial cultural insights within time-sensitive heritage conservation initiatives will be covered in more detail in the next parts of this essay [4].

DISCUSSION

This paper discusses two National Park Service programmes, one at Independence National Historical Park which emphasises the value of ethnicity and cultural representation in park usage and the other at Ellis Island that evaluates access options. The challenges involved—identifying the stakeholders, community, and local users, eliciting their cultural values, comprehending the significance that the site holds for various groups, and giving voice to their concerns and

perspectives are comparable to those that a conservation professional would take into account when assessing a site for its social sustainability.

Independence National Historical Park: Ethnicity, Use, and Cultural Representation

Beginning in 1994, Independence National Historical Park started creating a comprehensive management plan that would outline its fundamental management tenets and provide tactics for achieving its goals over the next ten to fifteen years. The public was heavily involved in the planning process, taking part in a number of public forums, televised town meetings, community tours, and planning workshops. The park sought to collaborate with nearby ethnic groups as part of this community outreach initiative in order to understand how to interpret their varied cultural heritages in the park's depiction of the American experience. Therefore, the research was created to provide a broad overview of ethnic groups connected to parks, along with an analysis of their values and the identification of cultural and natural resources utilised by and/or significant to the different communities on a cultural level. The study team spent a significant amount of time interviewing cultural authorities and canvassing the areas close to Independence National Historical Park.

Four local neighbourhoods were chosen for the research based on these observations and interviews: Southwark for African Americans, Little Saigon for Asians and Asian Americans, the Italian Market district for Italian Americans, and Norris Square for Latinos. The following factors were taken into consideration when choosing these neighbourhoods: they were close to the park; they had a visible sense of social and spatial integrity; and locals could take advantage of social services and organisations that affirmed their cultural identity. Members of both Conservative and Orthodox synagogues in the Society Hill neighbourhood were questioned as a "community of interest" rather than as a physically integrated region since the Jewish community could not be associated with a spatial community in the downtown area. 135 persons were consulted over the course of 36 field days in the form of focus groups, transect walks, and individual and expert interviews. According to the research question and cultural group, the data were coded and analysed. On cultural resource maps, any locations in and around the park that our study participants had personal or cultural connections to were noted. Each ethnic group has its own map, which was created [5], [6].

Relevant Findings: Cultural Representation

Cultural representation concerns were raised by several individuals. Jews and Italian Americans who had undergone assimilation had mixed feelings about showing themselves as unique from other Americans. African Americans, however, felt that the historical interpretation of the park lacked both material and cultural representation. "So much for them tourists, white people and so little for us African Americans, working-class neighbourhood residents," said some of those who saw the park as a symbol of the unequal allocation of public resources. Asian Americans and Latinos preferred a curatorial strategy that included their immigrant tales and was less concerned with national independence. Italian Americans were also interested in a more comprehensive depiction, with park interpretation extending up to the present rather than stopping in 1782 or 1800. African Americans, Latinos, and Jews are three of the ethnic groups who indicated locations or markers they would want to have put up to draw attention to their presence inside the park's limits. Many participants, especially those who were Latino, African American, or Asian, felt the need for additional family-friendly events and children's programmes. Residents were mostly interested in the park's recreational possibilities, its social open areas where one

may acquire food, relax, and sit on the grass, or as a location for civic and cultural festivals, as opposed to the visual, photographic experience that tourists want. These locals want a more laid-back, enjoyable, and bustling park.

Latinos as a group spent the freest time at the park for recreational reasons. Although several advisors from each of the other ethnic groups agreed with them, Latinos were especially keen on maximising the park's recreational potential [7], [8].

Table 1: REAP Methodology at Independence National Historical Park.

Method	Data	Duration	Product	What Can Be Learned
Historical and archival documents	Newspaper clippings, collection of books and articles, reading notes	7 days	History of site's relationship to surrounding communities	Provides historical context for current study and planning process
Behavioral maps	Time-space maps of sites	2 days	Description of daily activities on site	Identifies cultural activities on site
Transect walks	Transcribed interviews and consultant's map of site, special places, special events, and culturally significant areas	6 days	Description of site from community member's point of view; problem with using tour guides—ample data but seemed rote	Community centered understanding of site; local meaning; identification of sacred places
Individual interviews	Interview sheets in English, Spanish, Vietnamese, or Chinese with map	12 days	Description of responses of cultural groups in informal settings	Community responses and interest in the park
Expert interviews	In-depth interview transcriptions	10 days	Description of responses of local institutions and community leaders	Community leaders' interest in the park planning process
Formal-informal discussions; participant observation	Interview sheets	20 days	Description of context and history of project; description of park needs	Provides context for study and identifies NPS and community concerns
Focus groups	Field notes, tape recorded in English, Spanish, and Vietnamese; used facilitator and translator	6 days	Description of issues that emerge in small-group discussion (difficult to organize, conduct, and transcribe)	Enables understanding of conflicts and disagreement within cultural group

Relevant Findings: Cultural Values

The REAP showed that the park provides several benefits for Philadelphians that are often disregarded due to management's focus on pleasing tourists. The name "visitors" presented difficulties since locals who utilise the park do not consider themselves to be outsiders. One crucial feeling of territoriality is ignored when everyone is treated as a guest. The resident makes the park part of her property; the tourist is aware that she is a guest. The park serves as both a symbolic and practical component of the neighborhood's and city's overall environment in the eyes of the citizen. The inhabitant has a personal right of occupancy, moves about the city at her own pace, and prefers to be surrounded by familiar sights and locations. access. These sensitivities are hurt by tourist crowds, by being denied free access to historical monuments, and maybe by a focus on official interpretations. The significance of the sites and locations decreases for locals in direct proportion to more isolated the park's features are from the city they are in The REAP of Independence National Historical Park is an illustration of how cultural and racial concerns may affect utilisation or nonuse. A quick but thorough snapshot of the community and

its varied values, meanings, and sense of cultural representation can be obtained by identifying relevant cultural-ethnic groups as constituencies that reside in the neighbourhood where the park is located or that have historically had a relationship with it. Additionally, this REAP was able to discriminate between conflicting visitor and resident data and provide recommendations for potential fixes. For locals, the park occupies the same symbolic place as Independence Hall and the Liberty Bell do for visitors in terms of who gets to use it and whose identity is represented in it [9], [10].

CONCLUSION

For performing evaluations in the context of historic conservation sites, Rapid Ethnographic Assessment Procedures provide a useful method. REAP allows researchers to gather crucial cultural insights that influence conservation planning, community participation, and decision-making procedures by fusing anthropological methods with a time-effective framework. The use of REAP in historic conservation sites has a number of important advantages. By examining the interactions between people and the historic site, revealing cultural practises, and cataloguing intangible assets connected to the site, it first emphasises the social relevance of the location. This information is essential for creating conservation plans that respect the site's cultural significance and encourage its preservation. Second, REAP encourages involvement and engagement in the community. REAP empowers communities, ensures that their views are heard, and incorporates their perspectives into conservation programmes by incorporating local stakeholders in the assessment process. As a result of the community members' increased feeling of ownership, accountability, and active stewardship, conservation activities are more inclusive and sustainable.

Thirdly, REAP assists in identifying future disputes or difficulties in initiatives including historic protection. REAP allows researchers and stakeholders to proactively address any difficulties that may occur by revealing the social and cultural variables at play. This enables the creation of plans that respect the values and ambitions of the neighbourhood while minimising adverse effects and promoting sustainable development. The fundamental elements of REAP, such as pre-fieldwork planning, quick data collecting, data analysis, and the generation of useful insights, are what make it successful. With these elements in place, the assessment procedure is certain to be effective, focused, and capable of gathering pertinent cultural data within the time restrictions of heritage conservation initiatives. For performing evaluations of historic conservation sites, Rapid Ethnographic Assessment Procedures provide a useful tool. Researchers and practitioners may get timely and valuable insights on the cultural value, community dynamics, and social features of these places by integrating REAP into conservation efforts. This information helps in making better decisions, developing conservation strategies that are sensitive to cultural practises, and fostering community-based initiatives that guarantee the preservation and sustainable management of historic places for ensuing generations.

REFERENCES

[1] D. Griffith, “Immigrants Fleeing A Dying Industry: Applying Rapid Ethnographic Assessment Procedures To The Study Of Tobacco Farmworkers,” NAPA Bull., 2009, doi: 10.1111/j.1556-4797.2009.01017.x.

[2] D. H. Taplin, S. Scheld, and S. M. Low, “Rapid ethnographic assessment in urban parks: A case study of Independence National Historical Park,” Hum. Organ., 2002, doi:

10.17730/humo.61.1.6ayvl8t0aekf8vmy.

[3] S. M. Low, D. H. Taplin, and M. Lamb, “Battery Park City: An ethnographic field study of the community impact of 9/11,” Urban Aff. Rev., 2005, doi: 10.1177/1078087404272304.

[4] S. Ross, “Strategies for Municipal Participatory Governance and Implementing UN-Habitat’s New Urban Agenda: Improving Consultation and Participation in Urban Planning Decision-Making Processes Through Rapid Ethnographic Assessment Procedure,” SSRN Electron. J., 2017, doi: 10.2139/ssrn.3008945.

[5] S. Kodish, N. Aburto, F. Dibari, W. Brieger, S. P. Agostinho, and J. Gittelsohn, “Informing a behavior change communication strategy: Formative research findings from the scaling up nutrition movement in Mozambique,” Food Nutr. Bull., 2015, doi: 10.1177/0379572115598447.

[6] M. S. Da Silva, A. R. Antoniolli, J. S. Batista, and C. N. Da Mota, “Plantas medicinais usadas nos distúrbios do trato gastrintestinal no povoado Colônia Treze, Lagarto, SE, Brasil,” Acta Bot. Brasilica, 2006, doi: 10.1590/S0102-33062006000400007.

[7] K. M. Carley, M. W. Bigrigg, and B. Diallo, “Data-to-model: A mixed initiative approach for rapid ethnographic assessment,” Comput. Math. Organ. Theory, 2012, doi: 10.1007/s10588-012-9125-y.

[8] C. Vindrola-Padros, “A Brief History of the Work Prior to Rapid Ethnographies,” in Rapid Ethnographies, 2020. doi: 10.1017/9781108623568.003.

[9] S. Maria Silene da, A. Angelo Roberto, B. Josemar Sena, and M. Clarice Novaes da, “Plantas medicinais usadas nos dist{ú}rbios do trato gastrintestinal no povoado Col{ô}nia Treze, Lagarto, SE, Brasil,” Acta Bot. Brasilica, 2006.

[10] J. Goepp, N. P. Chin, T. Malia, and A. Poordabbagh, “Planning Emergency Medical Services for Children in Bolivia: part 2-results of a Rapid Assessment Procedure.,” Pediatr. Emerg. Care, 2004.

CHAPTER 8

ELLIS ISLAND ACCESS ALTERNATIVES: CONFLICTING CULTURAL VALUES

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ABSTRACT:

Since it served as the entry point for millions of immigrants to the United States, Ellis Island, which is situated in New York Harbour, has enormous historical and cultural importance. Due to competing cultural values and preservation issues, however, Ellis Island's accessibility has been a topic of continuous discussion. The opposing viewpoints concerning access to Ellis Island are examined in this abstract along with the numerous solutions put up to resolve them and their effects on cultural heritage and tourist experiences. Ellis Island's contrasting cultural values essentially centre on two issues: preservation and accessibility. On the one hand, preservationists make the case for restricted access to preserve the historical significance of the location and the original buildings and artefacts. They stress the need of preserving Ellis Island as a concrete emblem of the immigrant experience. On the other side, proponents of greater accessibility contend that Ellis Island ought to be accessible to more people so that they may connect with their ancestry, understand the history of immigration, and see the location for themselves. They believe that inclusion, education, and cross-cultural dialogue are all facilitated through accessibility. There have been many different options put out to resolve these opposing ideals. These options include of adopting time-restricted access, regulated visitation systems, virtual or augmented reality experiences, off-site interpreting facilities, and improved digital resources. Each option aims to strike a balance between accessibility and preservation by providing various methods for people to interact with Ellis Island's history while reducing any possible detrimental effects on the location.

KEYWORDS:

Accessibility, Bridge, Cultural, Preservation.

INTRODUCTION

These possibilities have ramifications for both the preservation of cultural assets and the experiences of visitors. Preservation-focused strategies put an emphasis on preserving the site's physical buildings and artefacts while preserving its integrity and authenticity. They could, however, restrict visitors' access to the site and their capacity to interact with it directly. Making Ellis Island more inclusive and instructive via accessibility-focused strategies aims to provide visitors the opportunity to connect with their ancestry and learn about the history of immigration. The possible effects on the site's physical integrity and visitor experience, however, must be carefully taken into account. It might be difficult to find a solution that addresses both preservation and accessibility issues. It takes careful thinking, cooperation among stakeholders, and a thorough knowledge of the site's importance and possible effects to balance these

competing cultural values. The selected strategy should ultimately strive to conserve Ellis Island's cultural legacy while granting tourists meaningful and equitable access. the competing cultural ideals surrounding the accessibility of Ellis Island provide a challenging conundrum. In order to find a balance between maintaining the site's integrity and making it accessible to a larger audience, preservation and accessibility activists have competing viewpoints, demanding alternate solutions [1].

The suggested solutions aim to resolve these issues while taking tourist experiences and cultural heritage protection into account. A solution that respects Ellis Island's cultural importance and accommodates the many demands of stakeholders and tourists would need careful study of the site's significance and the effects of various access possibilities. A tiny island in New York Harbour called Ellis Island is important to American history and culture because it served as the entry point for millions of immigrants between 1892 and 1954. It serves as a representation of opportunity, optimism, and the immigrant experience today. However, as different cultural values and preservation issues have evolved, the issue of access to Ellis Island has been a topic of continuous discussion. The introduction lays the groundwork for comprehending the divergent viewpoints about access to Ellis Island and the difficulties associated with the preservation of cultural heritage. It emphasizes Ellis Island's historical and cultural relevance as well as its importance to a variety of stakeholders, such as tourists, heritage advocates, and preservationists. It also emphasizes the need to strike a balance between maintaining the historical integrity of the site and giving tourists meaningful access to connect with it and learn about its importance [2], [3].

Ellis Island's Historical and Cultural Significance

Over 12 million immigrants who were looking for a fresh start in America used Ellis Island as their entry point. It symbolizes an important period in the history of the country and captures the hardships, aspirations, and ambitions of countless people and families. It has a strong cultural value as a consequence and serves as a concrete link to the immigrant experience and the rich legacy of the United States [4].

Cultures have divergent values:

Mainly preservation and accessibility are at odds with one other in the cultural ideals surrounding access to Ellis Island. To preserve the historical integrity of the location and guard against any harm to the original buildings and artefacts, preservationists call for restricted access. They stress the need of preserving Ellis Island as a physical illustration of the immigration experience. On the other side, proponents of greater accessibility contend that Ellis Island ought to be accessible to more people so that they may connect with their ancestry, understand the history of immigration, and see the location for themselves. They believe that inclusion, education, and cross-cultural dialogue are all facilitated through accessibility.

Challenges and Things to Think About

Finding a reasonable solution among the competing interests regarding Ellis Island's accessibility is difficult. Questions concerning possible tourist impact, physical building conservation, and the need to preserve the site's historical authenticity are raised by preservation issues. The promotion of accessibility, on the other hand, requires careful consideration of visitor experiences, education, and the possibility of congestion or site damage. It is a challenging endeavour that

calls for thorough consideration and cooperation among stakeholders to reach a conclusion that respects both preservation and accessibility considerations [5].

In order to strike a balance between preservation and accessibility, it is clear that various strategies must be taken into account. This is because there are opposing cultural norms around access to Ellis Island, which provide both difficulties and opportunities. These ideas provide viable answers to secure the preservation of the site while ensuring that visitors are engaged in meaningful ways, addressing the concerns of both preservationists and proponents of more access.

The opposing cultural ideals surrounding entry to Ellis Island provide a difficult conundrum, to sum up. Careful evaluation of the site's historical and cultural value, visitor experiences, and possible consequences are necessary to strike a balance between preservation and accessibility. In order to discover a solution that respects the cultural significance of Ellis Island while satisfying the many demands of stakeholders and tourists, the next parts of this essay will examine several strategies and their ramifications [6].

DISCUSSION

The aim of the study was to give comments on four different scenarios put forward in A Progress Report: Ellis Island Bridge and Access Alternatives from an anthropological viewpoint. For the purposes of this project, the culturally appropriate populations included local visitors to Battery Park and Liberty State Park, local service providers at Battery Park and Liberty State Park, such as vendors and small-scale tourist services, locals of the Jersey City neighborhoods next to Liberty State Park, special populations like children, the elderly, and the physically challenged, as well as "traditional cultural groups," those individuals whose family practices are rooted in a particular tradition.

The study initially focused on constituency groupings; however, as the project progressed, a values orientation-based analysis was included when constituency analysis failed to provide statistically significant clustering of comparable individuals and points of view. Battery Park, Liberty State Park, and the Jersey City neighborhoods that surround Liberty State Park were the three sites that the constituency groups provided a guide to sampling the users and residents about their perceptions of potential positive or negative impacts of each of the proposed access alternatives.

Through a variety of REAP data gathering techniques, such as behavioural maps, transect walks, individual interviews, expert interviews, spontaneous group interviews, and focus groups, their opinions and concerns were gathered. At the different field locations, groups finished. 318 persons in all were contacted, including 117 via individual interviews in the two parks, 113 via spontaneous focus groups held in public spaces in the neighbourhood, and 88 through focus groups held in parks and community centres. All of the replies from the focus groups and interviews were coded for analysis, and the results were then compared by constituency group. Constituency groups were defined as associations of individuals who share cultural values and ideas and are most likely to be similarly impacted by the suggested access choices. The diverse viewpoints held by consultants across the subgroups examined for this project were presented using correlational, content, and value orientation analyses [7], [8].

Relevant Findings: Interests and Attitudes

Service managers, city employees, park employees, ferry representatives, can collectors, and tour bus drivers in Battery Park, i.e., the constituencies with a stake in the success and profitability of Battery Park, were the ones who were most worried about the negative effects of a bridge. The biggest discrepancies in opinions about the planned. In Battery Park, a bridge was discovered between those who visited for recreation and those who visited to work; the former were more positive, the latter more negative. Additionally, a bridge was discovered between immigrants and native-born individuals; the immigrants were more positive, the native-born more negative. However, a few persons expressed worry about access to Ellis Island or questioned the social aims of the bridge option. Overall, Battery Park users were more worried about the economic repercussions of the suggested access alternatives.

With the noteworthy exception of such entrenched interests as Liberty State Park authorities and employees, who were strongly opposed to the planned bridge, constituency groupings in Liberty State Park were not indicative of opinions towards the alternatives. Active leisure participants, such as bikers and walkers, supported the bridge more than passive user groups and organised group leaders did. Additionally, there was a clear disparity between Latino and non-Latino consultants: when compared to non-Latino groups, Latino consultants were quite favourable about the access possibilities. Similar attitudes across user types and countries of origin were seen in Liberty State Park as they were in Battery Park. of contrast to the economic results of Battery Park, the two most commonly mentioned value orientations were health and recreation and park quality, which were followed by concerns about increased access and aesthetics [9], [10].

Table 1 REAP Methodology for Ellis Island Access Alternative Project.

Methods	Data	Duration	Product	What Can Be Learned
Physical traces mapping	Map of trash and clothing left in parks	1 day	Description of physical condition of site	Identifies night activities that would be affected by proposed bridge and alternatives
Behavioral maps	Time-space maps of site, field notes	2 days	Description of daily activities on site	Identifies daily activities that would be affected by proposed bridge and alternatives
Transect walks	Transcribed interviews and consultant's map of site, field notes	4 days	Description of site from community member's point of view	Community-centered understanding of site; local meaning
Individual interviews	Interview sheets, field notes	10 days	Description of responses of the constituency groups	Community and user responses to proposed bridge and alternatives
Expert interviews	In-depth interview transcriptions	5 days	Description of positions of local institutions and community leaders	Community leaders' responses to proposed bridge and alternatives
Group interviews	Field notes, video or tape recorded	5 days	Description of various community groups and their responses to the bridge and alternatives	Involves neighborhood and church groups in planning process; provides for public discussion of issues in local context
Focus groups	Field notes, video or tape recorded	2 days	Description of issues that emerge in small-group discussion	Enables development of a typology of responses and in-depth discussion of alternatives

Despite having somewhat diverse views on the matter, inhabitants of the several neighbourhoods that surround Liberty State Park were largely in favour of the planned bridge and less interested in the other options. Residents of Paulus Hook had a variety of views regarding the planned bridge and were worried about possible issues like increased traffic or insufficient parking. Residents of Van Vorst were more supportive and saw the planned bridge as a chance to improve democratic access to Ellis Island. They believed that the bridge's recreational advantages would enhance their neighbourhood. The planned bridge received the greatest support from Lafayette locals because it would enable them to visit Ellis Island without having to pay the ferry price, which was thought to be too expensive for families and groups of youngsters in this low-income region to afford. They, too, saw the bridge to be a feature that would enhance Liberty State Park's aesthetic appeal and recreational opportunities as well as those of their neighbourhood.

Relevant Findings: Value Orientations

The value orientations for the parks and neighbourhoods are contrasted in Table 2. This comparison makes it obvious that each location has a few somewhat different objectives and issues. Workers and users in Battery Park are more worried about the potential financial repercussions of the proposed access options than they are about the ferry's or the bridge's cost. Workers and visitors at Liberty State Park, on the other hand, are worried about the benefits of the access possibilities for health and leisure as well as the drawbacks for park quality. The expense is what Lafayette, Van Vorst, and Paulus Hook residents are most worried about.

Table 2: Value Orientations by Site in Ellis Island Access Alternative Project

Value Orientation	Battery Park	Liberty State Park	Surrounding Neighborhoods	Total
Cost	0	7	35	42
Access	13	8	20	41
Park quality	6	11	20	37
Economic	23	7	6	36
Health and recreation	9	11	9	29
Choice	9	7	5	21
Aesthetic	6	8	6	20
Social priorities	10	7	2	19
Political	8	5	3	16
Education	4	3	8	15
Personal	8	3	1	12
Safety and comfort	4	5	3	12
New technology	5	5	0	10
Ecological	2	3	4	9
No impact	9	0	0	9
Community quality	0	0	7	7

Of the boat or the suggested access option. Concerns about cost, accessibility, park quality, and economy were the most commonly voiced by all groups. Table 4 is helpful for comprehending the differences between these groups and may be used to determine how often consultants in this research reported a concern.

CONCLUSION

Due to opposing cultural values and preservation concerns, the issue of access to Ellis Island is still up for dispute. The challenging task of achieving meaningful access for tourists while preserving the historical integrity of the site calls for careful assessment and cooperation among stakeholders. Limited access is encouraged by preservationists in order to preserve the historical relevance and authenticity of the place. They stress the need of maintaining Ellis Island's historic buildings, artefacts, and structural integrity as a physical depiction of the immigrant experience. Their main worries are the possible effects of visitors and the possibility of site destruction. Ellis Island should be accessible to more people, according to proponents of greater inclusion, education, and cross-cultural interchange. They think that in order to comprehend the history of immigration and foster empathy, it is crucial to provide tourists the chance to connect with their ancestry and really experience the place. However, they must manage issues with congestion, possible harm, and maintaining the site's historical integrity. Investigating various strategies is necessary to come up with a solution that takes preservation and accessibility issues into account. These options include of adopting time-restricted access, regulated visitation systems, virtual or augmented reality experiences, off-site interpreting facilities, and improved digital resources. Each option aims to balance preservation and accessibility by providing various opportunities for visitors to interact with Ellis Island's history while minimizing any possible drawbacks. These possibilities have ramifications for both the preservation of cultural assets and the experiences of visitors. Preservation-focused strategies place a high priority on the preservation of tangible buildings and artefacts, guaranteeing the authenticity and integrity of the site. They could, however, restrict visitors' access to the site and their capacity to interact with it directly. Thoughtful consideration must be given to any possible effects on the site's physical integrity and the quality of visitor experiences before implementing accessibility-focused techniques that seek to make Ellis Island more inclusive and instructive. In the end, a solution that addresses both preservation and accessibility issues requires careful study, stakeholder participation, and a thorough understanding of the site's importance and possible effects. The conflicting cultural values surrounding access to Ellis Island require the investigation of alternate approaches. By finding a balanced approach, Ellis Island can continue to serve as a potent symbol of American history and the immigrant experience while providing meaningful and inclusive access for visitors. For the property to be preserved and to provide visitors with engaging experiences, accessibility and preservation issues must be balanced. Finding a solution that honours Ellis Island's cultural significance and satisfies the many requirements of both tourists and preservationists will depend heavily on the continuous discussion and cooperation among parties.

REFERENCES

[1] I. Ellis, C. Cheek, L. Jaffray, and T. C. Skinner, “Making a case for telehealth: Measuring the carbon cost of health-related travel,” Rural Remote Health, 2013, doi: 10.22605/rrh2723.

[2] S. Ellis, M. Haws, J. Mendiola, and M. Hemil, "Sustainable Small-scale Mariculture Ventures as a Comparative Climate Friendly Livelihood Alternative in Pohnpei, Federated States of Micronesia," in Climate Change Management, 2018. doi: 10.1007/978-3-319-70703-7_2.

[3] K. Ellis and M. Kent, "iTunes Is Pretty (Useless) When You're Blind: Digital Design Is Triggering Disability When It Could Be a Solution," M/C J., 2008, doi: 10.5204/mcj.55.

[4] A. Harrington et al., "News and notes," Procedia - Soc. Behav. Sci., 2015.

[5] J. Altimiras et al., "You Are Responsible For Checking That The Via Mobile App gives you full overview of your travel details on your mobile . Download the app for free !," J. Fish Biol., 2013.

[6] D. Hanahan et al., "Comparative 13C metabolic flux analysis of pyruvate dehydrogenase complex-deficient, L-valine-producing Corynebacterium glutamicum," Appl. Environ. Microbiol., 2011.

[7] C. Q. Cui, B. S. Cook, M. P. Cauchi, and J. R. Foerst, "A case series: Alternative access for refractory shock during cardiac arrest," Eur. Hear. J. - Case Reports, 2019, doi: 10.1093/ehjcr/ytz101.

[8] A. Banks, J. Gaca, and T. Kiefer, "Review of alternative access in transcatheter aortic valve replacement," Cardiovascular Diagnosis and Therapy. 2020. doi: 10.21037/cdt.2019.10.01.

[9] K. W. Eudailey et al., "Contemporary suprasternal transcatheter aortic valve replacement: A multicenter experience using a simple, reliable alternative access approach," Catheter. Cardiovasc. Interv., 2020, doi: 10.1002/ccd.28460.

[10] T. Kaneko et al., "Peripheral Versus Central Access For Alternative Access Transcatheter Aortic Valve Replacement (Tavr): Results From The Tvt Registry," J. Am. Coll. Cardiol., 2020, doi: 10.1016/s0735-1097(20)31804-0.

CHAPTER 9

A BRIEF STUDY ON SUSTAINABILITY AND THE CITY

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ABSTRACT:

The idea of sustainability has grown in importance in urban planning and development as cities continue to struggle with the problems of rising urbanisation, climate change, and resource scarcity. The main ideas, tactics, and advantages of developing sustainable urban settings are highlighted in this abstract, which examines the connection between sustainability and the city. Beginning with a focus on the importance of cities as hubs for social, cultural, and economic activity. Rapid urbanisation has brought forth a number of sustainability issues, including elevated energy use, pollution, waste production, and social inequality. Urban areas that are habitable, resilient, and ecologically friendly are being created as a result of cities implementing sustainable development concepts. In-depth discussion of the fundamental tenets of sustainability in the city is provided in the abstract, which also discusses the promotion of compact, mixed-use projects, effective transit systems, adoption of renewable energy sources, green infrastructure, and social fairness. It emphasises how crucial it is to include social, economic, and environmental factors into urban planning and architecture in order to maintain sustainability over the long run. examines the many methods and plans employed to establish sustainability in the city. These include urban agriculture, waste management, water conservation, green building design, sustainable transportation planning, and community involvement. In order to promote sustainable urban development, it highlights the need of multi-stakeholder engagement, policy support, and cutting-edge technology. There is also discussion on the advantages of implementing sustainable practises in the city. Urban landscapes that are sustainable may improve quality of life, public health, decrease greenhouse gas emissions, save resources, and spur economic development. They promote thriving, welcoming communities that put citizens' wellbeing first while preserving and enriching the environment.

KEYWORDS:

Development, Memory, Street, Sustainable, Sustainability.

INTRODUCTION

History has become the mechanism via which contemporary civilizations manage change. As they reflect on the remnants of the past that are still relevant to the present, historians work to preserve traditions as a living force that can withstand change. But because change is unavoidable and always speeding, the distance between history and the recall of facts or memory constantly grows. Limiting my debate to the preservation of the physical environment, I want to make the case that how this chasm between history and memory is bridged either in a static, didactic fashion or as an unscripted, improvised process is crucial to the idea of sustainable cities. But first, we must examine the conflict that preservation and conservation concerns inevitably bring up between history and memory. According to Maurice Halbwachs, the act of

remembering or collective memory is influenced by social structures like families, faiths, or mythologies as well as physical locations like homes, cities, and historical sites. These frameworks serve as storage spaces for ideas or memories, which makes them helpful for recall. But how are these frames produced, and how do they come to represent widely held ideas or perceptions? And if the foundation is architectural, how can memories, tales, and myths connect to bricks and mortar? Few proponents of communal memory respond to these questions [1], [2].

Halbwachs' contrast between history and memory enables us to see that whereas history is a reconstruction that is always problematic and unfinished, memory is living and constantly evolving. Additionally, since memory is a mental effort, it is private and individual, as opposed to the socially created, shared by a group or collective framework in which memory is kept. But how are individual memories and societal history connected? How do we transition between them? Again, after analysis, it seems that the solutions are not present. Thus, the words "history" and "memory," as well as the relationship between individual and group recollection, are problematic [3].

David Lowenthal takes advantage of this issue by asserting that history and preservation of the built environment, or what he refers to as heritage, are two quite distinct endeavors. He contends that legacy's virtue rather than its flaw is the manufacture of "history," as heritage willfully exaggerates and omits, freely invents and forgets, and lives on memory lapses and ignorance. Accept that "fiction is not the opposite of fact but its complement, giving our lives a more lasting shape." According to Lowenthal, history attempts to reveal the truth and mainly depends on facts and accurate critical judgement. It makes an effort to lessen the prejudice, mistakes, and irrationalities that give rise to heritage. Furthermore, history presumes that its language is universal and accessible to everyone, but legacy is seldom generally accurate and often speaks exclusively to a small group and their fabricated legacies [4], [5]. According to Lowenthal, heritage modifies history in a number of ways:

i. It improves, making the past seem better than it actually was;

ii. It updates, restoring only from the viewpoint and interests of the present;

iii. It jumbles various time periods and incongruous events, presenting them all at once;

iv. It selectively forgets what may appear too negative or too incomprehensible;

v. It fabricates genealogies, erecting fictitious lineages;

At the conclusion of this section, he makes the following side observation: "(These modes of contrivance, have much in common with cinema, through which many, if not most, people derive compelling notions of the past.)" The public enjoys consuming these fictions and illusions, much as heritage thrives on generating "artifice" and "fictionalizing" the past, or so Lowenthal presumes. It seems that "LITE" history is easier to drink and less damaging than pure history, much like American beer. As a living force, the past is always rebuilt, says Lowenthal, adding that "only a heritage reanimated stays relevant." Furthermore, "To reshape is as vital as to preserve and, we might add, to fabricate.

DISCUSSION

Despite the fact that Lowenthal acknowledges that societies constantly alter, reshape, and animate the social frameworks in which memories are stored, exploiting the distinction between

history and memory by tossing "authenticity" to the wind and elevating "fabrication" to a virtue does not address the problems of sustainability. Herein lies the sustainability problem since it conflates the memory container with the memories the container creates. If the legacy business wants to escape being manipulated by marketing, ideologies, religions, and countries, memory should not be messed with so carelessly. The building of the container may be unique to time and location, continually recreating its framework. We need to be more detailed about the types of memory containers we build and how they impact recollection and recall in order to make this distinction evident.

As a result, we must discuss the problem of how a city's shared and communal memory is created. We need to consider if the topological patterns and architectural expressions of a city may serve as a meeting place for indefinite daydreaming and creative thought. Frances Yates asserts in The Art of Memory that memory work is a mental tour of a house's rooms or a city's landmarks, utilising the symbols held in this fictitious container as triggers to unearth related thoughts. This technique makes it easier to repeat previously recorded information in a mostly static way. In contrast, Mary Carruthers contends in The Craft of Thought that the goal is to provide a thinker the tools to create content on the spot. In other words, the practise of memory is a method for learning new information. She acknowledges that architecture serves as the primary metaphor for memory spaces, but she is certain that this cliché also applies to creativity, composition, and manufacture, not only storage. She points out that the roots of both inventory and innovation may be found in the Latin term inventio. Any creative thought requires a collection of saved pictures that are organised in some way. However, the parallel, transference, and metaphor used in the correlation of pictures with certain information is done in an open-ended way, allowing for inventive creations [6], [7].

In a similar vein, I would argue that Carruthers' approach to the art of remembering, not Yates', is what contributes to sustainability in terms of the preservation of the built environment. The sights and impressions of a city, as well as the tourist itineraries, should be linked to creativity in the sense of "discovery" or original thought, rather than the repetition of already learned information. The memory work is what matters, not the place, since the latter just provides hints to the cognitive process that should come next. Carruthers uses the example of the Vietnam Veterans Memorial in Washington, D.C. to illustrate how this way of remembering differs from the static account of communal memory.It has become a place of pilgrimage for a wide range of people or organisations, including those who supported the war and continue to feel it was unlawful and unethical as well as others who opposed it and felt it was right. However, the simple names of the Americans who lost their lives in Vietnam, which are carved in stone on the wall, have come to trigger millions of memories for the diverse visitors. These names don't signify anything, yet the wall encourages narrative, and it is those tales that leave a lasting impression. The many groups come together in a common practise of sharing tales to reflect on the experience of the conflict. Some visitors bring memorial trinkets to put at the spot, while others record specific names with photos or rubbings. These actions provide each person the ability to draw from this information, adapt it into their own tales, and create fresh memories. This endlessly creative and open-minded thinking regarding the Vietnam War is supported by the memorial itself. How can we use this unrestricted innovative thinking to analyse historic locations and depictions of the city? How can we make them into structures for holding onto memories?

For instances of how "history" and "memory" have been handled during the last three decades, let me turn to New York City. I'll examine how the desire to preserve the built environment and urban perceptions has been incorporated into three initiatives to see how the city's image has been manipulated: Battery Park City, where nostalgia for earlier images of the city came to the fore and blended with policies of urban design and real estate development, and Times Square Now!, where there is a free-for-all competition for signage, lighting, and advertisement that creates a ludicrous atmosphere. South Street Seaport, where it was assumed that the images of the city being manipulated were authentic and that the process of urban design and historic preservation was antidevelopment [8], [9].

South Street Seaport

In the 1960s, South Street Seaport in lower Manhattan just ten minutes' walk from City Hall was the scene of a classic waterfront reorganisation game. The last remnants of New York's mercantile past an eleven-block region of four- and five-story commercial buildings from the late eighteenth and early nineteenth centuries seemed in danger due to a Wall Street construction boom in the 1960s and the relocation of Fulton Market, which had occupied the spot since 1822. The region was unsuitable for urban renewal since it only had run-down buildings, crumbling piers sticking out into the East River, mediocre businesses, and squatter housing. In those days, it had the right to be referred to as a "slum." The Lower Manhattan Plan of 1966 suggested that office and luxury residential towers be built on landfill extended out to the pier lining the entire waterfront from the Brooklyn Bridge on the East River to Battery Park on the Hudson River because the financial district was overcrowded and running out of space.

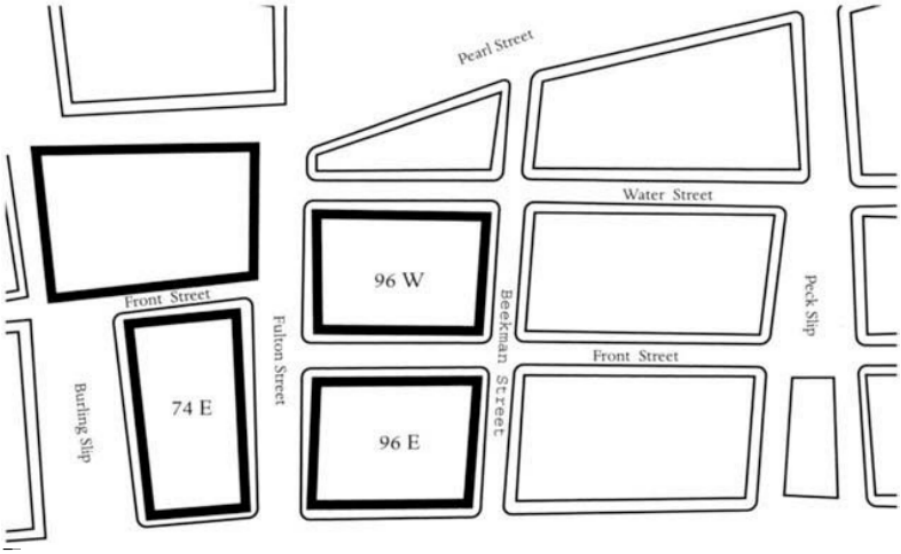

Figure 1: South Street Seaport Contested blocks for preservation and transfer of development rights, circa 1976.

An expanded development area is located around Schermerhorn Row's renowned historic buildings. The city approved the transfer of the development rights for these buildings to nonhistoric westward plots next to the Row so that a very tall skyscraper could be built there. The entrance to this very dramatic and illusionistic place was manned by the Titanic Memorial

However, there were other aspirations for the waterfront as well. Some believed that the decline in shipping traffic was the perfect opportunity to restore the waterfront to its former splendour by building a maritime museum. And the Friends of South Street Seaport intended to build a living outdoor museum out of four blocks of the former commercial area along the East River, with the ancient counting house of Schermerhorn Row as its focal point, to recreate the atmosphere of a "street of ships" Figure 1. So started a protracted negotiation process in which many parties exchanged land sections, but several economic downturns and an oversupply of office real estate development delayed the reconstruction until the late 1970s.

South Street Seaport was made a historic district in 1977, but today's definition of "preservation" goes beyond simply preserving the rich maritime history of nineteenth-century New York to include a new objective: the development of a perpetual tourist destination accompanied by residential and commercial growth. The Rouse Company, the city, the Seaport Museum, and the Urban Development Corporation collaborated on a concept in 1979 to transform South Street Seaport into a festival marketplace modelled after Faneuil Hall in Boston and Harborplace in Baltimore.

Lighthouse. After crossing this boundary, the rough textures of granite, brick, and stone communicated a busy mood, but the building that looked like a tin shed and was exposed to the street was well suited for traditional marketing strategies. A newly built market hall on Pier 17 fronting the river provided a new location for community gatherings, and throughout the area, design guidelines prescribed logos, outdoor signs, historic markers, and posters to emphasise the neighborhood's marine motif.

Figure 2: South Street Seaport Richard Haas trompe l'oeil wall mural, winter 1993 Photo by M. Christine Boyer [getty].

Arcade, a trompe l'oeil wall mural by Richard Haas that depicts Schermerhorn Row and the Brooklyn Bridge in the Seaport, relays the work of the artifice and brings the viewer's perspective back to the centred tableau so they don't wander just a few blocks away from this historical tableau. As growth pressures increase, preservation of the built environment often takes a backseat since it is gradual and fragmented in nature. By the time South Street Seaport was formally inaugurated in 1983, Cannon's Walk, an internal arcade of shops, had taken up three-quarters of the museum display space. The revival of culture stagnated while redevelopment prospered [10], [11]. How much can change in fifteen years! The original city scene, which had been meticulously erected, is now hard to locate. Instead, commercial space was heaped up until Pier 17 and Fulton Market were overtaken by chain businesses. The nautical fish motifs have vanished completely, leaving just a faint, unpleasant remnant. In anticipation of being converted into a hotel, South Street Seaport has transformed into a ghost town. For the lower Manhattan residential areas that are starting to develop, imagine a 24-hour retail centre. The phrase "authentic of place" did not translate into financial success.

CONCLUSION

Cities must prioritise sustainability as they deal with the complicated issues of rising urbanisation, climate change, and resource scarcity. This essay has examined the connection between sustainability and the city, emphasising the essential ideas, tactics, and advantages of developing sustainable urban settings. Cities are important in determining the destiny of our world because they are hubs of innovation, trade, and economic activity. But unsustainable urban expansion patterns have led to resource depletion, social inequality, and environmental harm. To solve these problems and build livable, resilient, and eco-friendly cities, it is crucial to embrace sustainability principles. The city's sustainability principles include a wide range of topics, such as efficient transit systems, the utilisation of renewable energy sources, green infrastructure, and social fairness. These ideas may be incorporated into urban planning and design to help cities save resources, lessen pollution, and build inclusive and healthy communities. A variety of tactics and techniques are needed to implement sustainability in the city. These include urban agriculture, waste management, water conservation, green building design, sustainable transportation planning, and community involvement. Sustainable urban growth must be fueled by stakeholder cooperation, encouraging policies, and the use of cutting-edge technology. Adopting sustainable practises in the city has a wide range of positive effects. Sustainable urban settings increase the quality of life for locals, boost the economy, decrease carbon emissions, and improve public health outcomes. Cities can build thriving, inclusive communities that put inhabitants' well-being first while preserving and enriching the environment by putting sustainability first. As cities negotiate the problems of urbanisation and work towards a more sustainable future, sustainability is a vital factor. Cities may overcome the environmental and socioeconomic difficulties they confront and build livable, resilient, and ecologically aware cities by adopting sustainable concepts, policies, and practises. In order to create cities that are sustainable and advantageous to both current and future generations, sustainability implementation in the city demands constant dedication, cooperation, and innovation.

REFERENCES

[1] S. Kawakubo, S. Murakami, T. Ikaga, and Y. Asami, “Sustainability assessment of cities: SDGs and GHG emissions,” Build. Res. Inf., 2018, doi: 10.1080/09613218.2017.1356120.

[2] A. M. Toli and N. Murtagh, "The Concept of Sustainability in Smart City Definitions," Frontiers in Built Environment. 2020. doi: 10.3389/fbuil.2020.00077.

[3] D. L. Herrmann, W. D. Shuster, A. L. Mayer, and A. S. Garmestani, "Sustainability for shrinking cities," Sustainability (Switzerland). 2016. doi: 10.3390/su8090911.

[4] J. Rześny–Cieplińska and A. Szmelter–Jarosz, "Environmental sustainability in city logistics measures," Energies, 2020, doi: 10.3390/en13061303.

[5] K. G. Fernández, A. I. Moreno-Calles, A. Casas, and J. Blancas, "Contributions of urban collective gardens to local sustainability in Mexico City," Sustain., 2020, doi: 10.3390/su12187562.

[6] C. M. Tudorie, E. Gielen, M. Vallés-Planells, and F. Galiana, "Urban green indicators: A tool to estimate the sustainability of our cities," Int. J. Des. Nat. Ecodynamics, 2019, doi: 10.2495/DNE-V14-N1-19-29.

[7] A. Andronicеanu, "The social sustainability of smart cities: Urban technological innovation, big data management, and the cognitive internet of things," Geopolit. Hist. Int. Relations, 2019, doi: 10.22381/GHIR11120197.

[8] J. Gibberd, "Strengthening Sustainability Planning: The City Capability Framework," in Procedia Engineering, 2017. doi: 10.1016/j.proeng.2017.07.084.

[9] T. Chanapathi, S. Thatikonda, V. P. Pandey, and S. Shrestha, "Fuzzy-based approach for evaluating groundwater sustainability of Asian cities," Sustain. Cities Soc., 2019, doi: 10.1016/j.scs.2018.09.027.

[10] F. Bifulco, A. D'Auria, C. C. Amitrano, and M. Tregua, "Crossing technology and sustainability in cities' development," Sustain. Sci., 2018, doi: 10.1007/s11625-018-0548-3.

[11] K. Ziari, A. Pourahmad, B. Fotouhi Mehrabani, and A. Hosseini, "Environmental sustainability in cities by biophilic city approach: a case study of Tehran," Int. J. Urban Sci., 2018, doi: 10.1080/12265934.2018.1425153.

CHAPTER 10

AN EXPLORATION OF THE BATTERY PARK CITY

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ABSTRACT:

Battery Park City, a famous urban development in Lower Manhattan, New York City, is an example of how sustainability concepts may be used in both design and operation. This abstract highlights Battery Park City's relevance as a paradigm for sustainable urban development by examining its fundamental characteristics, planning approaches, and sustainable practises. opens with a description of the location, timeline, and goal of Battery Park City. It was envisioned in the 1960s as a method to revitalise the Lower Manhattan waterfront while also addressing the demand for more housing and open space. In today's world, Battery Park City is a vibrant mixed-use neighbourhood that places a high value on environmental protection, quality of life, and sustainability. In-depth discussion of Battery Park City's distinguishing characteristics and master planning techniques is provided in the abstract. These include the utilisation of parks and green areas, energy-efficient construction techniques, sustainable transportation alternatives, and a focus on social and economic fairness. By combining residential, commercial, and recreational areas, Battery Park City exemplifies the value of mixed-use development and demonstrates how it can help build a thriving and cohesive city. Battery Park City's environmental practises, including the utilisation of renewable energy sources, green building certifications, stormwater management systems, trash reduction and recycling initiatives, and accessibility to public transit. These methods aid in lowering carbon emissions, preserving resources, improving the quality of the air and water, and fostering a safe and sustainable living environment. Battery Park City is a prime example of the advantages of sustainable urban growth. It highlights how incorporating sustainability into a city's design may improve livability, environmental protection, and economic development. Battery Park City's success is a result of its dedication to sustainability principles, stakeholder cooperation, and continual innovation in urban planning and architecture.

KEYWORDS:

Battery, Design, Development, Sustainability, Sustainable.

INTRODUCTION

Lower Manhattan in New York City is home to the famed urban development known as Battery Park City. It is a shining example of ecologically responsible and sustainable urban development. An overview of Battery Park City, its background, and its importance as a case study for sustainable urban development are given in this introduction. In order to address the demand for more housing, open space, and economic revival in Lower Manhattan, Battery Park City was conceived in the 1960s. Prior to its transformation into a flourishing mixed-use community that places a premium on sustainability, quality of life, and environmental stewardship, the region was mostly used for industrial and commercial purposes. The establishment of public spaces, the preservation of historical structures, and the incorporation of sustainable design concepts were

all taken into consideration throughout the building of Battery Park City. It attempted to balance the needs of the community, environmental preservation, and economic growth. The abundance of parks and green areas in Battery Park City is one of its distinguishing qualities. These places provide locals and tourists chances for leisure, relaxation, and contact with nature. Additionally, in order to cut down on energy use and lessen its negative effects on the environment, the development prioritises energy-efficient construction techniques and uses sustainable design features.

In order to promote environmentally friendly mobility, Battery Park City promotes walking, biking, and using public transit. Through a variety of transit networks, the region is well-connected to the rest of Manhattan, decreasing the need for private vehicles and supporting a more efficient and environmentally friendly form of mobility. Battery Park City also demonstrates a dedication to social and economic fairness. A varied and inclusive community is ensured through the development's inclusion of inexpensive housing alternatives. Additionally, it grants access to services, institutions of higher learning, and employment possibilities, fostering social progress and economic development. Battery Park City's overall approach to sustainable urban development is the key to its success. It serves as an example for other cities and urban planners, proving that it is feasible to build socially just and ecologically beneficial communities within the boundaries of a crowded metropolitan region.

We shall examine the unique characteristics, tactics, and accomplishments of Battery Park City as a sustainable urban development in the parts that follow. We may learn important lessons about how sustainability principles can be successfully incorporated into urban development projects, resulting in a more sustainable and resilient future, by looking at the many components of its design, planning, and execution. A notable illustration of sustainable urban development is Battery Park City. It shows how cities can prioritise sustainability and construct thriving, livable communities by integrating green areas, energy-efficient buildings, sustainable transportation, and social fairness. Future urban projects that aim to strike a balance between social justice, environmental sustainability, and economic growth should take inspiration from Battery Park City. In the parts that follow, this essay will examine the distinctive qualities, tactics, and accomplishments of Battery Park City as a sustainable urban development project [1]–[3].

DISCUSSION

Battery Park City emerged as yet another far city scene on the opposite side of lower Manhattan. This idealised New York neighbourhood was built in the 1980s on 92 acres of landfill at the southern point of Manhattan Figure 1 and 2. If this newest section of Manhattan were a movie set, New Yorkers would laugh at the ridiculous concentration of city monuments, according to one writer. Here, one can find the appearance of prewar apartment buildings mixed with Brooklyn Heights views and atmosphere, replicas of lampposts and benches from Central Park, as well as design cues from Gramercy Park's exclusive neighbourhood and Olmsted's vast landscape legacy. All of them were gathered here in miniature form. This "urban dream" was based on a master plan from 1979 that included design requirements and included architectural design cues from some of the greatest residential neighbourhoods in the city, including Fifth Avenue, Central Park West, and Riverside Drive. The grid arrangement of Manhattan's streets and the more subdued effects of its lighting, signs, and colours also had an influence. Most New Yorkers agreed with the master plan's writers that Manhattan looked fine as it was and that "most

of the attempts by modernist architects and planners to rethink the basic shape of the city have resulted in disaster."

Battery Park City was constructed on new landfill, so it did not rely on or borrow from the instinct for historic preservation. However, this collection of architectural and urban forms was organised around a longing for the 1920s commercial heyday in New York, which served as the organising principle. A total of 50 acres were set aside for public space, including vest-pocket parks between towering buildings, atriums with palm palms within, festival markets, and seaside promenades that were complemented by a vibrant public art programme and electric lighting displays[4]–[6].

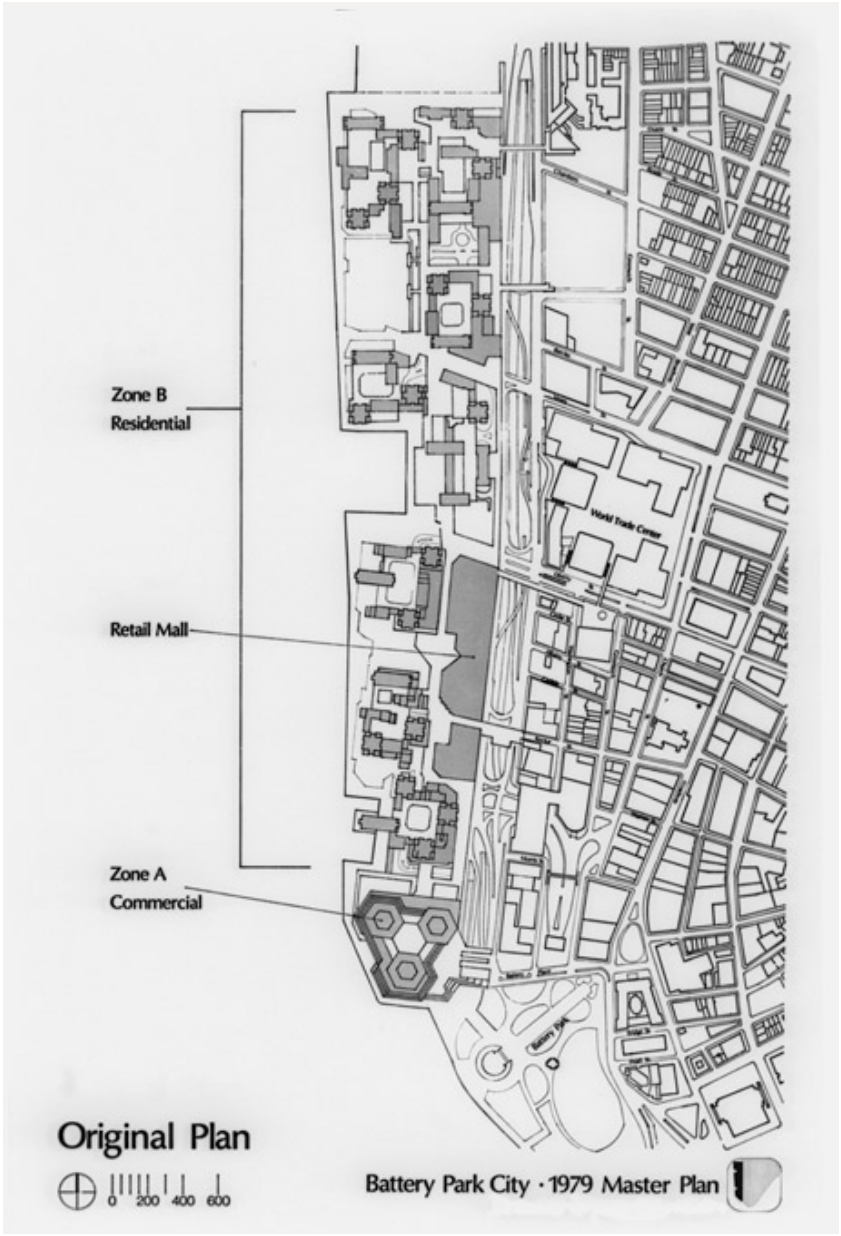

Figure 1: Battery Park City Plan, circa 1979.

With its wooden boardwalks, lookout towers shaped like the Statue of Liberty's crown, bowed bridge, and semicircular jetty set against a rocky coastal garden of beach grass, wild roses, and sumacs, South Cove, a seashell-shaped park, played on a variety of childhood memories. The goal of this tableau was to revive New York's history as a river town. The approximately two-mile promenade terminates in Hudson River Park, whose eight acres of undulating fields and meadows were designed by Olmsted and Vaux in the eighteenth century.

Figure 2: Battery Park City, 1975-85, Cesar Pelli architect [getty].

Figure 3: Battery Park City, Winter Garden facade, circa 1995 Photo by M. Christine Boyer.

Battery Park City showed New Yorkers how to feel, not think, about the past and how to get over the feeling of failure and catastrophe that modernism gave and that the city's budgetary crisis in the middle of the 1970s symbolised, which included the city's almost going bankrupt. It was a carefully constructed deception, and it seems that its architectural elements were effective in enveloping the observer in nostalgic visions from its valiant past. It is a unique historical document that incorporates propaganda and persuasive strategies from the advertising industry. In the end, Battery Park City was developed by image makers who, to use their own words, envisioned the area as "More New York, New York." Unsurprisingly, a series of picture essays, or "City Tales," were published to promote the autumn 1988 launch of the World Financial Centre.

Were ordered by the Drenttel Doyle Partners advertising, design, and marketing agency. Dana Goia, a poet, and authors like Jamaica Kincaid and Mark O'Donnell were invited by the company to share their favourite aspects of New York show in Figure 3.They had the freedom to select their own themes, which included listening in on New Yorkers' discussions, applauding Korean grocery stores that are open all hours of the night, seeing arrivals and departures at Grand Central Station, and researching the peculiar jobs held by New Yorkers. Thus, Battery Park City's faked and mimicked artifice ultimately succeeded in creating viewers for its architecture via an expensive marketing strategy as opposed to providing building for them [7]–[9].

CONCLUSION

An outstanding example of sustainable urban development is Battery Park City, which shows how social, economic, and environmental factors may be successfully combined. Battery Park City has turned a once industrial region into a dynamic, livable, and ecologically aware city by adhering to sustainability principles. The main characteristics and tactics used in Battery Park City have aided in its success. Extensive green areas and parks improve the visual appeal while also offering locals and tourists priceless recreational and ecological advantages. A greener and more sustainable built environment has been promoted as a result of energy-efficient construction techniques and environmentally friendly design aspects that have decreased energy use and minimised environmental damage. The focus on environmentally friendly transport methods in Battery Park City has led to a decrease in the usage of personal automobiles and an increase in the use of public transit, walking and cycling. This has not only helped to relieve traffic congestion but has also improved air quality and encouraged the use of a more wholesome and environmentally friendly means of transportation. Furthermore, Battery Park City's dedication to social fairness is apparent in the accessible facilities and cheap housing alternatives it offers, fostering a varied and inclusive neighborhood. This emphasis on social well-being has enhanced the quality of life for its citizens and promoted a feeling of communal solidarity.

Urban planners and other communities may learn a lot from Battery Park City's accomplishments as a sustainable urban development. It shows that in the limitations of a highly populated metropolitan region, it is feasible to develop ecologically sustainable, socially just, and commercially successful communities. Cities may work to create more resilient and sustainable urban environments by prioritising sustainability principles and implementing creative initiatives. However, to guarantee Battery Park City's sustained success and sustainability, stakeholders must maintain their commitment and work together. To maintain the community's sustainable practises and preserve its history as a model for sustainable urban development, regular monitoring and adaptation to developing environmental and social issues will be required

[10], [11]. Battery Park City is a prime example of the benefits that sustainable urban development may bring about. Future urban developments may be guided by its successes in environmental preservation, social equality, and economic viability. Cities can build healthy, resilient, and inclusive communities that put the welfare of the present and future generations first by embracing sustainability concepts and using cutting-edge tactics.

REFERENCES

[1] S. Medio, "Photovoltaic design integration at Battery Park City, New York," Buildings, 2013, doi: 10.3390/buildings3020341.

[2] A. Shkuda, "Housing the 'Front Office to the World': Urban Planning for the Service Economy in Battery Park City, New York," J. Plan. Hist., 2014, doi: 10.1177/1538513212474225.

[3] K. S. Lee, "Large-scale sustainable housing development in a high-density area: The case of Battery Park City development, New York," Int. J. Architecton. Spat. Environ. Des., 2016, doi: 10.18848/2325-1662/CGP/v10i02/1-13.

[4] S. M. Low, D. H. Taplin, and M. Lamb, "Battery Park City: An ethnographic field study of the community impact of 9/11," Urban Aff. Rev., 2005, doi: 10.1177/1078087404272304.

[5] K. Ichihara and J. P. Cohen, "New York City property values: What is the impact of green roofs on rental pricing?," Letters in Spatial and Resource Sciences. 2011. doi: 10.1007/s12076-010-0046-4.

[6] A. Doud, "Battery Park City: Reimagining Lower Manhattan," SSRN Electron. J., 2013, doi: 10.2139/ssrn.2322718.

[7] M. van der Veen and W. K. Korthals Altes, "Contracts and Learning in Complex Urban Projects," Int. J. Urban Reg. Res., 2012, doi: 10.1111/j.1468-2427.2011.01053.x.

[8] M. van der Veen and W. K. K. Altes, "Strategic urban projects in Amsterdam and New York: Incomplete contracts and good faith in different legal systems," Urban Stud., 2009, doi: 10.1177/0042098009102136.

[9] S. Zukin, "Whose Culture? Whose City?," in Common Ground?: Readings and Reflections on Public Space, 2009. doi: 10.4324/9780203873960-17.

[10] G. Smithsimon, September 12: Community and neighborhood recovery at ground zero. 2011. doi: 10.1177/0094306112468721bb.

[11] S. Guner and A. Ozdemir, "Stochastic energy storage capacity model of EV parking lots," IET Gener. Transm. Distrib., 2017, doi: 10.1049/iet-gtd.2016.1406.

CHAPTER 11

SUSTAINABILITY AND BUILDINGS: SUSTAINABLE SOLUTIONS TO DECAY AND INFESTATION IN TIMBER

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ABSTRACT:

Given the growing problems with deterioration and infestation in wood structures, sustainability of buildings is an important factor. In order to solve these issues, this abstract investigates sustainable alternatives utilising the instance of rot and infestation in lumber. The introduction of the abstract emphasises the negative impacts of deterioration and infestation on wood buildings as well as the significance of sustainability in the built environment. The structural integrity and lifespan of wood structures are seriously threatened by decay, which is brought on by fungus and dampness, and infestation, which is brought on by insects and vermin. Due to the necessity for regular replacements and the use of hazardous chemicals for treatment, these problems not only raise maintenance costs but also have an impact on the environment. Sustainable methods are required to control infestation and degradation in wood. In-depth discussion of several strategies that may be used is provided in the abstract, including preventative measures including good design and building practises, the use of sturdy wood species, and efficient moisture management systems. These steps are intended to make wood less prone to rot and infestation, extending its lifetime and lowering the need for intensive care. environmentally friendly ways to address timber's current rotting and pest problems. This involves the use of safe, non-toxic treatments like borate-based preservatives, which efficiently combat organisms that cause deterioration while inflicting the least amount of damage to the environment and human health. the need of regular inspection and upkeep procedures to guarantee the long-term viability of wood constructions. In order to avoid and solve decay and infestation problems, regular inspections, quick fixes, and adequate ventilation are essential.

KEYWORDS:

Buildings, Deterioration, Infestation, Sapwood, Structures.

INTRODUCTION

An excellent English warship with 100 guns, THE QUEEN CHARLOTTE, was launched at Deptford in 1810 but had to be rebuilt before she could be put into service at sea (Ramsbottom 1937). The Royal Navy's ships had always experienced deterioration, but the severity of the new issue got reporters' attention, and "dry rot" became a hot subject for conjecture (Ridout 2000). After it became clear that damage would also happen to structures, such as when kitchen floor joists were buried in wet ground (Lingard 1819), many individuals (such as George 1829 and Wade 1815) started looking for an explanation. The Navy Office's Bowden (1815) came to the

conclusion that one of the main reasons for ship problems was the usage of unseasoned imported softwoods in a damp atmosphere. By the end of the eighteenth century, oak, the customary building material, was practically hard to get in sufficient numbers to maintain the fleet (Greenhalgh Albion, 1926), thus it was augmented with vast amounts of softwood, mostly from northern Europe.

Similarly, Johnson (1795) believed that the switch from oak to softwood and the usage of the latter in environments where it would stay moist were the root causes of dry rot in structures. The issue with warships dates back to previous eras when kings, deaf to the pleas of their naval advisors, surrendered oak forests to iron and glassworkers in an effort to fill the royal coffers (Ramsbottom 1937). Unfortunately, it took years for oak to reach the size necessary for the massive curving timbers of warships, and when it was felled carelessly, it was not a resource that could be sustained [1], [2].

Two thousand mature trees were needed for the building of the Temeraire, a battleship constructed in 1798 from oak felled in the Hainault forest (Ramsbottom, 1937). The importation of European oak helped to increase supply, but rising costs made building projects less affordable. Starting about 1750, softwoods with less durable natural properties replaced hardwoods as the standard construction material in England. Even though they didn't have the same longevity as oak, the softwoods utilised in England throughout the eighteenth and nineteenth centuries weren't typically perishable timbers.

The issues facing the fleet were substantially resolved by the usage of iron hulls, and it was discovered that keeping the lumber dry may prevent dry rot in structures. Therefore, decay fungi were only really a concern when there was inadequate care or when exceptional conditions let the wood stay moist for a long time. Speculative building that advanced as and when money was available is an illustration of the latter (Britton 1875). Because sapwood only makes up a tiny fraction of the large, mature pine tree trunks that are used to make construction timbers, wood-boring insects were also unable to do much harm [3], [4].

Despite the fact that commercial equilibrium had been restored, it was never going to endure since wild forests are a limited resource. By the end of the nineteenth century, the issue of a nonsustainable resource had reemerged, further reducing the natural durability of the wood. The usage of wood for these huge components had been replaced by reinforced concrete or steel by the turn of the 20th century since large structural sizes of softwood were becoming difficult to find in England (Bateson 1948). Timber was increasingly being acquired from plantations or regenerated forests since natural forests had grown exhausted or harder to use. The trend was about to pick up speed. Large amounts of softwoods were utilised as trench and mine supports during the 1914–18 war (Stobart 1927), which resulted in a severe scarcity of timber following the conflict.

To fulfil the need for affordable houses, however, a significant amount of European wood was brought into England during the interwar period. Because of its low quality, occasionally stacks of this lumber had to be scrubbed clean of fungus before it could be used (Dewar 1933). The historic wild forests of Europe have ultimately given way to managed woods in the hunt for a sustainable timber supply because economic factors demand that the trees be pushed to grow to a marketable size as quickly as possible. The lumber does not necessarily have to be less durable as Dewar (1933) suggested, but it also is not more durable than its wild-grown counterpart. There are many other places of the globe where this issue is present; it is not simply a European

issue. We must first take into account why a change in the way a tree is cultivated could affect the qualities of the wood we acquire from it if we are going to look for sustainable solutions to decay concerns in construction timbers [5], [6].

DISCUSSION

Adopting sustainable ways to prevent deterioration and infestation in wooden structures helps the economy in addition to the environment. Sustainable practises reduce costs and enhance resource efficiency by prolonging the life of wood constructions and lowering the need for replacement. In order to handle concerns with deterioration and infestation in wood constructions, sustainable solutions are crucial. The sustainability of wood structures may be greatly improved by putting preventative measures into place, choosing eco-friendly treatment choices, and establishing regular monitoring and maintenance procedures. These procedures support the long-term survival of lumber as a sustainable building material while also promoting economic effectiveness and environmental preservation. The remainder of this essay will dig into particular tactics, real-world examples, and top recommendations for dealing with rot and infestation in wooden structures [7], [8].

Sapwood and Heartwood

When cut down, European redwood trees (Pinus sylvestris) typically weighed about 200 pounds Figure 1, but P. sylvestris is often cultivated on plantations with a much shorter crop cycle. In order to boost growth rate by eliminating competition from neighbouring trees, stands are now pruned. Additionally, trees are cultivated on healthy soils wherever feasible to promote crop viability. This was substantially quantified by Uusvaara (1974), who claimed that in southern Finland, pine enters a diameter class that meets saw log standards at a minimum height of 18 feet (5.5 m) and a top diameter of 5.5 inches (140 mm). He discovered that after a growth period of thirty to thirty-five years, 9 percent of trees would achieve the minimum saw log size on bad soil (Vaccinium-type vegetation), and 40 percent on better-quality soils (Myrtillus and Oxalis-Myrtillus-type vegetation). P. sylvestris typically takes around 55 years of development to attain a size that is marketable in the United Kingdom, generating trees that are around 200 millimetres (breast height) in diameter. Larger-dimension softwood timbers are difficult to get in England. In a tree, there are it widens as it rises to its peak and becomes taller. The cambium, a little strip of tissue located directly beneath the bark, is where the width increases.

Inner bark (phloem) and outer wood (xylem) cells are both produced by the cambium. The term "sapwood" refers to the exterior wood. The only portion of the woody stem that retains live tissue is the sapwood zone of the tree. The sapwood undergoes active conduction, and because it is soaked with sap, air is not involved. This gives the tree a protective outer layer that shields it from several infections. Because of the active function it performed in the live tree, the sapwood has a greater nutritional content than the rest of the trunk after the tree is cut down. This is because the sapwood dries through levels where an assembly of decay organisms may penetrate. Therefore, sapwood of all timber species is susceptible to rot. When the deepest sapwood cells die, heartwood is generated around the pith of the live tree. This transition is accompanied by the loss of nutrients and the deposition of a variety of organic materials, some of which may have biocidal effects. These organic components collected under the umbrella word extractives are what provide the heartwood with the inherent toughness it is destined to grow [9].

It depends on the individual when the transition from the eventually brittle sapwood to the more resilient heartwood starts. In Finnish pine, it started after thirty to forty years, as shown by Bruun and Willberg (1964), although this was impacted by north-south geographic variances. In his research of a plantation, Uusvaara (1974) discovered that the shift started after twenty years. According to Uusvaara, "wood with a particularly low heartwood percentage will be obtained from young fast growing pine plantations because the amount of heartwood seems to be associated simultaneously with age, growth rate, and site type". The average heartwood percentage in pine produced on plantations is barely half that of stems with natural origins, the author finds. Heartwood content determines natural durability Figure 1, but even in the presence of heartwood, there is another possible issue.

Figure 1: Five-hundred-year-old European redwood (Pinus sylvestris) in the Kenozero National Park in northwest Russia. The redwood trees used for buildings in the United Kingdom were generally 200 to 300 years old when felled, and the wood had good natural durability. Photo by Brian Ridout [getty] [10].

Figure 2: Joint cut in a 200-year-old log of European redwood in the Kenozero National Park. Note the minimal outer sapwood zone and the close, evenly spaced growth rings in the heartwood. Photo by Brian Ridout.

CONCLUSION

The sustainability of wood structures is seriously threatened by decay and infestation, but these problems may be efficiently resolved using sustainable solutions. In order to battle deterioration and infestation in wood buildings, many strategies have been examined in this study. The significance of preventative measures, eco-friendly treatment alternatives, and continuous maintenance procedures has been highlighted. The vulnerability of wood to decay and infestation may be decreased by utilising suitable design and construction methods, choosing durable timber species, and adding efficient moisture management systems. These preventative actions reduce the need for expensive repairs and replacements while also extending the lifespan of wood structures. Effective solutions to address current decay and infestation problems are provided through sustainable treatment choices, such as the use of ecologically safe and non-toxic preservatives like borate-based treatments. These therapies focus on organisms that cause deterioration while inflicting the least amount of damage to the environment and human health.

Additionally, regular inspection and upkeep procedures are essential for maintaining the integrity of wood structures. Regular inspections, quick fixes, and adequate ventilation all work to spot early signs of deterioration and infestation, halting further harm and extending the life of wood buildings. Adopting environmentally friendly treatments for rot and pest infestation in wood structures helps the economy as well as the environment. Sustainable practises lessen the need for frequent replacements by extending the life of wood buildings, which saves money and improves resource efficiency. In order to ensure the long-term viability of wood structures in the face of problems with decay and infestation, sustainable solutions are essential. Timber buildings may prosper as durable and sustainable construction solutions by enacting preventative actions, using eco-friendly treatment alternatives, and embracing continuous maintenance practises. Successfully implementing these sustainable practises not only safeguards the structural integrity of wood structures but also fosters economic viability and environmental responsibility.

REFERENCES

[1] P. O. Akadiri, E. A. Chinyio, and P. O. Olomolaiye, "Design of a sustainable building: A conceptual framework for implementing sustainability in the building sector," Buildings, 2012, doi: 10.3390/buildings2020126.

[2] H. Zabihi, F. Habib, and L. Mirsaeedie, "Sustainability in Building and Construction : Revising Definitions and Concepts," Int. J. Emerg. Sci., 2012.

[3] J. P. Carvalho, L. Bragança, and R. Mateus, "Optimising building sustainability assessment using BIM," Autom. Constr., 2019, doi: 10.1016/j.autcon.2019.02.021.

[4] R. Isaksson and M. Rosvall, "Understanding building sustainability–the case of Sweden," Total Qual. Manag. Bus. Excell., 2020, doi: 10.1080/14783363.2020.1853520.

[5] B. Herazo and G. Lizarralde, "Understanding stakeholders' approaches to sustainability in building projects," Sustain. Cities Soc., 2016, doi: 10.1016/j.scs.2016.05.019.

[6] M. Sharma, "Development of a 'Green building sustainability model' for Green buildings in India," J. Clean. Prod., 2018, doi: 10.1016/j.jclepro.2018.04.154.

[7] J. P. Carvalho, I. Alecrim, L. Bragança, and R. Mateus, "Integrating BIM-based LCA and building sustainability assessment," Sustain., 2020, doi: 10.3390/SU12187468.

[8] J. P. Carvalho, L. Bragança, and R. Mateus, "A systematic review of the role of BIM in building sustainability assessment methods," Appl. Sci., 2020, doi: 10.3390/app10134444.

[9] W. H. Wan Ismail, "Sustainability of Buildings in Historic City of Malacca," Asian J. Environ. Stud., 2018, doi: 10.21834/aje-bs.v3i7.269.

[10] M. Abdallah, B. Akyeampong, and K. El-Rayes, "Maximizing sustainability of existing buildings within limited upgrade budgets," Can. J. Civ. Eng., 2018, doi: 10.1139/cjce-2017-0346.

CHAPTER 12

A STUDY ON DURABILITY OF JUVENILE WOOD

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ABSTRACT:

When using timber resources, it is essential to take young wood's durability into account. The features, difficulties, and prospective solutions pertaining to the durability of young wood are examined in this abstract. In the early years of a tree's development, often closer to the centre of the tree trunk, wood is created that is referred to as juvenile wood. It is well recognised that it differs from mature wood in terms of its anatomical structure and physical characteristics, making it more prone to decay, dimensional instability, and decreased mechanical strength. The performance and durability of timber products created from juvenile wood are hampered by these qualities. In-depth discussion of juvenile wood's reduced density, larger percentage of earlywood, and lower extractive content is provided in the abstract. These elements contribute to its lowered natural durability and poor resistance to organisms that cause degradation. Additionally, the necessity to solve the issues with juvenile wood's durability is further highlighted by the rising prevalence of juvenile wood in commercial timber sources as a result of shorter rotation cycles and higher demand. Various techniques and treatments may be used to increase the durability of young wood. The abstract looks at many possible fixes, including genetic modification, thermal modification, preservative treatments, and wood selection based on growth characteristics. These methods seek to enhance the mechanical, dimensional, and decay resistance of young wood, making it more appropriate for long-term uses.

KEYWORDS:

Durability, Juvenile, Resistance, Stilbenes, Young.

INTRODUCTION

Any tree's juvenile core is made up of the first few growth rings closest to the pith, which might be sapwood or heartwood. There are a number of ways that this young wood is different from adult wood, but changes in cell walls are most important for structural considerations. Cellulose microfibrils are found in the thickest layer of the cell wall and, in mature wood, are aligned approximately parallel to the longitudinal axis of the tree. This indicates that mature wood has little longitudinal shrinkage. A solid wood product may distort lengthways during unrestrained drying if there is an excess of juvenile wood because the microfibrils in juvenile wood are shorter and at noticeably bigger angles to the axis, making longitudinal shrinkage more noticeable. The high fibre angle makes the wood weaker than typical wood of the same density and increases the likelihood that it would fail under tension under load [1], [2].

According to the trait being researched, the juvenile period's length is likely very varied and may vary . It is often believed to last over the first 10 to twenty years of growing. The quantity of juvenile material present in converted wood is considerably increased by the broader growth rings created by thinning the plantation to provide growing room and/or the smaller bole width

produced by early harvesting. The information in Table 1 was provided by Ramsay Smith and Briggs in 1986. Their results are in line with those of Elliot , who conducted a study of the literature and shown that thick pine growth, which slowed development, also decreased the amount of juvenile wood [3], [4].

Table 1: Changes in percent of juvenile wood present at different growth rates/tree age at felling for Douglas fir, assuming a twenty-year juvenile period.

Age of Tree When Felled	Rate of Growth (rings/25mm)	Width of Juvenile Core (mm)	Percent of Juvenile Wood in Trunk
540	30	25	5
72	4	125	25
36	2	250	60

Figure 3: Stack of plantation-grown redwood in a U.K. woodyard. The stack is composed mostly of juvenile wood and sapwood with blue-stain fungus. This wood has very little natural durability. Photo by Brian Ridout.

According to the debate thus far, sapwood and juvenile wood would make up the whole tree when it reaches the minimum age in Finland for saw logs, which is thirty to thirty-five years. The information supplied by Ramsay Smith and Briggs also indicates that a large proportion of juvenile wood is expected to be produced during an economically feasible crop rotation period with other timbers. For the sake of this discussion, the issue is what impact this has on durability, a topic that has not received much attention recently [5], [6].

DISCUSSION

Blocks of European redwood that had been infected with a variety of fungus and kept for four months in Kolle flasks were investigated by Rennerfelt for their resistance to deterioration. These blocks were selected from the inner and outer heartwood, and decay resistance was measured as a percentage weight loss. In Table 2, some of Rennerfeft's findings are shown. These findings imply that mature heartwood might be considerably resistant to assault by certain species of fungus and that different fungi have different capacities for decomposing it. For instance, Serpula lacrymans often causes a weight loss in the inner heartwood that is much greater than the weight loss in the sapwood, although the outer heartwood seems to be quite resistant to assault. Only in cases when the tree is so young that there is likely no mature heartwood present do inner and outer heartwood weight decreases match. Wood's extractive content seems to be related to its inherent durability. This many were proven by Rudman and Da Costa in 1959 [7], [8].

Table 2 Percent weight loss of pine samples after four months' exposure to decay fungi.

a. *Coniphora puteana* (wet rot)

Age of Tree	Sapwood	Outer Heartwood	Inner Heartwood
269	35.5	2.3	39.3
230	38.7	16.1	39.5
213	32.2	4.3	21.6
193	39.3	23.9	32.8
85	29.4	19.3	31.8
34	35.9	19.2	32.5

When scientists evaluated teak's resistance to two different rot fungus years ago. They discovered that resistance didn't start developing until five to ten growth rings from the pith had developed and that solvent treatment to remove extractives dramatically lowered resistance to decay in all wood. After being combined with the mountain ash sawdust, these extractives considerably increased most of the samples' resistance to the typically vulnerable species. There may be significant differences in extractive content amongst trees, and these differences seem to be genetically rather than environmentally influenced.

Based on research, it has been shown that thujaplicins and thujic acid make up the majority of the extractives that provide western red cedar decay resistance. Six healthy ancient trees and ten healthy second-growth trees were used in Nault's 1988 study of extractives. He discovered that extractives dropped in sapwood and rose from the pith to the outer heartwood. Less young wood had more extractives than older wood. "Products made from the wood of younger trees, with reduced amounts of thujaplicins, will be less resistant to decay than those made from older trees," he said in his conclusion. Two phenolic chemicals, pinosylvin and pinosylvin

monomethyl ether, were discovered in the heartwood of the European redwood, and Rennerfelt demonstrated that they were very poisonous to fungus. More recently, Celimine et al. shown that the stilbenes contributed to wood decay resistance against brown rot fungus but were ineffective against white rot fungi. Browning believed that these chemicals are responsible for the durability of P. sylvestris heartwood. However, the test procedure employed to determine their outcomes varied.

b. *Lentinus lepideus* (wet rot)

Age of Tree	Sapwood	Outer Heartwood	Inner Heartwood
259	40.0	24.0	35.4
230	44.0	38.3	43.3
213	35.8	25.0	32.7
193	45.4	36.8	41.7
85	33.5	20.6	28.2
34	50.7	46.0	45.0

c. *Serpula lacrymans* (dry rot)

Age of Tree	Sapwood	Outer Heartwood	Inner Heartwood
269	38.5	0	29.1
230	42.8	0.7	35.6
213	43.8	0.8	20.0
193	55.8	1.1	1.7
85	33.5	1.2	–
34	42.7	16.3	17.6

According to Rennerfelt , the distribution of the stilbenes was what led to the difference in durability he discovered between inner and outer heartwood . It would seem that either the stilbenes were not as prevalent in the inner heartwood or that a greater proportion of the ether, which Rennerfelt discovered to be less effective as a fungicide than pinosylvin, was present in the inner heartwood. The findings of Erdtman, Frank, and Lindstedt that showed that the mature heartwood of 252 Swedish pine trees averaged 0.96 percent of the stilbenes, whereas the core

averaged 0.77 percent, lend credence to these hypotheses. The analysis of 20 trees from three stands by Erdtman and Misiorny for the stilbenes yielded an average of 1.4 percent from the outermost layer. cores, and 0.75 percent from the heartwood. Further investigation revealed that pinosylvin made up roughly 28% of the stilbenes in mature heartwood and 18% in core wood.

These findings seem to explain Rennerfelt's observations, but further research employing cutting-edge analytical methods is required. For instance, the distribution of stilbenes is consistent with that of Bergström et al., who likewise demonstrated that pinosylvin levels decreased from the outer heartwood into the core but whose studies were only made over a short distance. By indicating that the most significant action of stilbenes may be to restrict free water from the wood and so reduce its availability to fungus, Celimine et al. further compounded the matter. According to Rennerfelt and his Swedish colleagues, the distribution of stilbenes throughout the trunk should thus tend to make the juvenile wood wetter than the adult heartwood, as shown by Zobel and Sprague. The later authors also claim that when mature heartwood is developed and the juvenile wood gets saturated with resins and polyphenols, the moisture distribution may reverse. They contend that because of the floods, young wood is ultimately more resistant to decay than adult heartwood. Zabel and Morrell give multiple references to show that resistance to decay often rises from the core to the heartwood-sapwood border in a number of tree species, refuting this concept and demonstrating that it is not generally true [9], [10].

CONCLUSION

When using timber resources, juvenile wood's durability is an important factor. The features, difficulties, and prospective solutions pertaining to the durability of juvenile wood have been examined in this research. When compared to adult wood, juvenile wood has unique characteristics that make it more prone to decay, dimensional instability, and lower mechanical strength. Juvenile wood is created in the early years of tree development. The performance and durability of wood products over the long term are affected by these difficulties. Various techniques and treatments may be used to increase the durability of young wood. These include genetic alteration, thermal modification, preservative treatments, and wood selection based on growth characteristics. These methods seek to make juvenile wood more suited for long-term uses by enhancing decay resistance, dimensional stability, and mechanical qualities. The durability of juvenile wood is a problem that must be addressed through sustainable forest management techniques. The amount of juvenile wood in harvested timber may be influenced, which improves the durability properties, by using the right trees, silvicultural methods, and rotation cycles. For the sustainable use of timber resources, juvenile wood's durability must be addressed. The possible negative effects of using juvenile wood may be reduced by being aware of its unique difficulties and using the right techniques. This promotes the sustainable use of timber resources while ensuring the long-term performance and durability of wood products. To continue expanding our knowledge of the durability of juvenile wood and creating novel solutions, further study and cooperation between scientists, foresters, and industry experts are required. The durability of juvenile wood is a complicated topic, but with the correct ideas and practises, its shortcomings can be overcame. in doing so, we may unleash the full potential of juvenile wood as a vital and sustainable resource for the building and woodworking sectors. We can successfully use this resource and support a more robust and sustainable future for the timber sector by maximising the potential of juvenile wood via selection, treatment, and sustainable forest management.

REFERENCES

[1] A. Mazán, M. Vanco, and Š. Barcík, "Influence of technological parameters on tool durability during machining of juvenile wood," BioResources, 2017, doi: 10.15376/biores.12.2.2367-2378.

[2] W. Darmawan, D. Nandika, B. D. H. Afaf, I. Rahayu, and D. Lumongga, "Radial variation in selected wood properties of indonesian merkusii pine," J. Korean Wood Sci. Technol., 2018, doi: 10.5658/WOOD.2018.46.4.323.

[3] J. de O. Lopes, R. A. Garcia, and N. D. de Souza, "Infrared spectroscopy of the surface of thermally-modified teak juvenile wood," Maderas Cienc. y Tecnol., 2018, doi: 10.4067/S0718-221X2018005041901.

[4] C. Brischke, L. Emmerich, D. G. B. Nienaber, and S. Bollmus, "Biological durability of sapling-wood products used for gardening and outdoor decoration," Forests, 2019, doi: 10.3390/F10121152.

[5] R. de Avila Delucis, P. H. G. de Cademartori, A. L. Missio, and D. A. Gatto, "Decay resistance of four fast-growing eucalypts wood exposed to three types of fields," Maderas Cienc. y Tecnol., 2016, doi: 10.4067/S0718-221X2016005000004.

[6] Baharudin, A. D. Yunianti, I. Taskirawati, and Agussalim, "The evaluation of Agathis wood from densification process to the resistance of Trametes versicolor fungi," in IOP Conference Series: Earth and Environmental Science, 2019. doi: 10.1088/1755-1315/374/1/012043.

[7] B. C. Bal and I. Bektaş, "The effects of heat treatment on the physical properties of juvenile wood and mature wood of Eucalyptus grandis," BioResources, 2012, doi: 10.15376/biores.7.4.5117-5127.

[8] R. Moya, B. Bond, and H. Quesada, "A review of heartwood properties of Tectona grandis trees from fast-growth plantations," Wood Science and Technology. 2014. doi: 10.1007/s00226-014-0618-3.

[9] D. N. A. bin Yusoff, "Isu dan Permasalahan Hubungan Anatara Agama Isu dan Permasalahan Hubungan Anatar Agama Di Malaysia Kini dan Jalan Penyelesaiannya," For. Ecol. Manage., 2015.

[10] Paulo Gentil, "Bases Científicas do Treinamento de Hipertrofia," Ann. For. Sci., 2018.

CHAPTER 13

TOWARD A SUSTAINABLE MANAGEMENT PLAN: THE CASE OF STONEHENGE AND AVEBURY

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ABSTRACT:

A sustainable management strategy is necessary to handle these issues. The abstract explores the essential elements and factors to take into account while creating such a strategy, such as stakeholder involvement, site monitoring, cultural heritage protection, environmental management, and improved tourist experiences. Engaging stakeholders is essential to creating a sustainable management plan that takes into account the various viewpoints and objectives of local communities, heritage organisations, governmental bodies, and other pertinent stakeholders. This group of stakeholders may help the plan strike a good balance between conservation objectives and social and economic factors by participating in decision-making procedures. In order to evaluate the state of the sites and spot any risks or vulnerabilities, site monitoring is essential. To guarantee the long-term preservation of Stonehenge and Avebury, it facilitates the application of focused conservation measures and adaptive management plans. Protecting the distinctive cultural, architectural, and archaeological qualities of Stonehenge and Avebury is the main goal of cultural heritage conservation. This involves monitoring tourist effects, doing routine maintenance on buildings, and incorporating archaeological research into management practices.

KEYWORDS:

Avebury, Cultural, Conversation, Management, Stonehenge.

INTRODUCTION

In 1986, Stonehenge, Avebury, and adjacent sites were included as a single World Heritage Site under the designation Site C373. The distance between the two regions, which together total more than 4,50 hectares, is around 30 km. There are many more prehistoric buildings, the bulk of which were constructed between 4,000 and 6,000 years ago, including several for ceremonial and burial purposes. Many of them still exist today as noteworthy landscape elements, and they are connected to one another as well as the host landscape. What we witness now are remnant cultural landscapes that, despite their deteriorated condition, nonetheless serve as a reminder of the abilities and labour of the peoples who created and used them. The management of these settings sometimes entails balancing the occasionally opposing interests of landowners, tourists, and the monuments themselves. The creation of a management plan is the first step in establishing sustainability principles at the local, regional, national, and international levels. We start with the Stonehenge region, which is home to numerous additional monuments in addition to having the world's most well-known stone circle.

For instance, between 280 and 220 B.C., a large henge was built at Durrington Walls. It has a massive earthen bank and ditch that is nearly 50 metres in diameter and is now partially filled. A minor henge called Woodhenge lay to the southwest of Durrington Walls and had concentric rings of postholes. To the north of Stonehenge is a mysterious structure known as the Stonehenge Cursus. This 2. 8 km long, 10 to 15 metre broad enclosure is rectangular in shape. Its function is unclear, however it seems to be related to burial monuments and might have had a ceremonial purpose for the deceased. Again, soil and chalk from the exterior bordering ditches are excavated for its construction [1], [2]. The round barrow burials from the early Bronze Age are among the region around Stonehenge's most spectacular earthen constructions. Individual burials began to occur at this period; the wealthy tombs comprised both inhumations and cremations and were surrounded by enormous circular mounds of chalk and soil that were mined nearby [3], [4].

There are many linear cemeteries, each comprising a significant number of barrows, that have been thoughtfully placed within the Stonehenge landscape on actual ridge lines or, when seen from the centre, false horizons. As a result, they are visible from both Stonehenge and other significant locations in the vicinity. Round barrows of many shapes and sizes, including disc, bell, bowl, and pond barrows, may be found in large numbers in barrow groupings like the Normanton Down Group, which is located south of Stonehenge. Each barrow has a core principal inhumation that is typically cut below the present-day soil surface and covered by the mound. It is common practise to carve secondary burials which may be inhumation or cremation burials into this mound and the adjacent ditch. The Trilithons' stone circle at Stonehenge is what makes it renowned. The Avenue, a processional road that spans for 2.5 km between Stonehenge and the River Avon, is what defines the approach to this circle, which is located within of an earthen henge.

Figure 1: The Stone Circle of Stonehenge, Showing the Condition of the Stones.

The earthen wall and enclosing ditch, which had a circumference of around 100 metres and had been dated to about 2950 B.C., was the site's earliest monument. There were 56 trenches known as the Aubrey Holes within this enclosure, which may have formerly contained wood uprights. This enclosure, which may have started out as a causewayed camp, features many minor entrances around the circuit in addition to its major entrance in the northeast. A second major

phase, lasting between 2900 and 2500 B.C., saw the construction of a wood setting, or numerous settings, inside the henge and the insertion of cremation graves into the now-empty Aubrey Holes and the filling-up ditch. Around 2400 B.C., work on the stone circle's last phase began when bluestone from Wales' Presceli Mountains, more than 200 km distant, was brought there to build a monument that is no longer standing. Then massive blocks of sarsen were constructed [5], [6].

DISCUSSION

utilised to construct the outer stone circle and inner horseshoe of five Trilithons at Stonehenge after being hauled from the Avebury region of the Marlborough Downs. A Trilithon, which has come to represent the location, consists of two substantial uprights with a cross lintel. Stonehenge kept its main entrance throughout its long existence in the northeast, which coincides with the midsummer dawn and up to which The Avenue comes. With the open end facing the dawn and the biggest and most finely sculpted Trilithon sealing the end and creating a focus on the centre point, the inner five Trilithons are placed in a horseshoe pattern around this midsummer axis. The stones underwent a number of minor rearrangings until the site was abandoned about 1600 B.C. Stonehenge stands out and is unlike any other modern building because to the exquisite stonework and utilisation of advanced structural engineering and architectural methods [7], [8].

Despite sharing many characteristics with Stonehenge, the archaeology of the Avebury region has its own unique personality and palimpsest of structures. Silbury Hill is without a doubt the earthwork in the UK with the most striking visual impact. It is more than 40 metres high, making this massive and unusual mound the tallest man-made mound in all of Europe. It is encircled by a large quarry ditch that hasn't been completely dug because of the water table's level. One of the oldest structures in the region, the Windmill Hill Causewayed Enclosure consists of a roughly circular enclosure made of three concentric rings of banks and ditches that are punctured by causeways at regular intervals. Its largest point is around 300 by 400 metres, and it was in use between 3000 and 2500 B.C. The Avebury region is home to a large number of further monuments that belong to the same time period and would have been in use in the Neolithic and early Bronze Age. Other stone circles, long barrows, and round barrows are among them; nevertheless, compared to Stonehenge, the Avebury region includes fewer barrow graves.

Figure 2: Aerial view of Avebury Henge, showing the ditch and bank of the monument together with the re-erected stones in the southwest.

A particularly spectacular monument is the West Kennet Long Barrow, which is mostly made of chalk debris but also includes a stone facade. A large, straight mound with stone burial chambers at the eastern end makes up this tomb. Two flanking ditches provided the material for the mound, which was quarried. It is the second-longest such tomb in Britain at 100 metres, and it is also one of the finest maintained. The five burial chambers, the connecting hallway, and the facade were all constructed out of local sarsen stone. This tomb was in use for a very long time; it was built in the early Neolithic about 3700 B.C., and a great gateway stone shut it in the Beaker era, around 2000 B.C [9], [10]. Avebury Henge consists of a roughly circular enclosure enclosed by a massive bank and ditch that has a diameter of about 350 metres and is located within the enclosure. Four gateways that are still in use today and with contemporary roadways cutting through them separate the enclosure from the outside world. These entrances roughly line up with the compass's cardinal directions. There were once three stone circles within the enclosure, with the biggest one close to the ditch's border and two smaller ones those that are located to the north and south.

The biggest stone circle in the UK is made of unworked sarsen, in contrast to Stonehenge. Between 2600 and 2100 B.C., the monument was constructed. Although their dates are uncertain, its structural phases are identifiable. The henge is approached by two ceremonial stone paths, one of which connects it to The Sanctuary, a different Neolithic structure located approximately 2.3 km distant. Although the individual structures are remarkable, like in the case of Stonehenge, it is the whole landscape that makes these places unique. It's the fact that we may distinguish between geographical organization and a system of connections that have changed and grown over a long time, in both instances over a period of more than a thousand years. It would be useful to offer some background information about the legislative history and the World Heritage Convention before examining the present status at the two sites.

United Kingdom Legislation

The land use planning and environmental conservation systems in the UK are well developed and comparatively complete. This has evolved over time and in a piecemeal fashion, but it offers a significant degree of protection to natural and cultural sites through the designation of important conservation features and areas via legislation governing archaeological or historic buildings, as well as through structural and local plans and policies and subsequent development control, via planning legislation. In the UK, the land use planning process is hierarchical in structure, with more in-depth planning and control taking place at the regional or local level and broad policy being made at the national level. As a result, there are a number of rules for the World Heritage Sites that, although not unique to them, have an effect on the activities that take place there. It is crucial to remember that in the UK, a World Heritage Site does not receive any extra or unique legislative restrictions. Recently, this policy framework has incorporated laws originating from the European Commission as well as promises made by the U.K. government under international treaties including the Valletta treaty and the RAMSAR treaty on wetlands. There are several methods in which the planning system provides legislative restrictions in addition to non-statutory measures, like as management plans created by landowners, may have an impact on this.

CONCLUSION

As important ancient sites, Stonehenge and Avebury need a sustainable management strategy to guarantee their preservation and long-term viability. In order to construct such a strategy, taking

into account the cultural, environmental, and social aspects of the sites, this study has examined the essential elements and factors to be taken into account. Stakeholder involvement, site monitoring, cultural heritage protection, environmental management, and improvement of the tourist experience should all be part of the sustainable management plan for Stonehenge and Avebury. The plan may take into account many viewpoints and guarantee a balanced approach that takes into account both conservation aims and social and economic factors by interacting with local communities, heritage organizations and governmental organizations.Monitoring the sites is essential for evaluating their status and spotting any risks or weaknesses. This guarantees the continuous preservation of Stonehenge and Avebury by enabling the implementation of focused conservation measures and adaptive management plans. Protecting the distinctive qualities of the places, particularly their archaeological and cultural importance, is the main goal of cultural heritage conservation. The preservation of Stonehenge's and Avebury's cultural legacy is dependent on ongoing maintenance and repairs to the structures, careful management of tourist effects, and the incorporation of archaeological research.

Environmental management is essential for preserving the surrounding natural environment. Addressing erosion, protecting biodiversity, and using sustainable land use techniques improve the biological context of Stonehenge and Avebury while also enhancing the general sustainability of the environment. Enhancing the visitor experience aims to offer better access, amenities, and explanation while reducing adverse effects. To provide a sustainable and pleasurable experience for visitors while maintaining the integrity of the sites and their environs, it is crucial to balance tourist access with conservation concerns.In order to ensure the long-term preservation, enjoyment, and sustainability of Stonehenge and Avebury, a sustainable management plan must be created. A balanced and sustainable approach may be accomplished by combining cultural, environmental, and social components and putting into practise initiatives like stakeholder involvement, site monitoring, cultural heritage protection, environmental management, and visitor experience improvement. If such a strategy is successfully carried out, future generations will be able to continue to cherish and learn from these amazing ancient sites while maintaining their intrinsic worth and relevance.

REFERENCES

[1] N. H. Hoang And C. Fogarassy, “Sustainability Evaluation Of Municipal Solid Waste Management System For Hanoi (Vietnam)-Why To Choose The ‘Waste-To-Energy’ Concept,” Sustain., 2020, Doi: 10.3390/Su12031085.

[2] G. Banias Et Al., “A Life Cycle Analysis Approach For The Evaluation Of Municipal Solid Waste Management Practices: The Case Study Of The Region Of Central Macedonia, Greece,” Sustain., 2020, Doi: 10.3390/Su12198221.

[3] A. Almoradie Et Al., “Current Flood Risk Management Practices In Ghana: Gaps And Opportunities For Improving Resilience,” J. Flood Risk Manag., 2020, Doi: 10.1111/Jfr3.12664.

[4] Q. Huang, Y. Fei, H. Yang, X. Gu, And M. Songer, “Giant Panda National Park, A Step Towards Streamlining Protected Areas And Cohesive Conservation Management In China,” Glob. Ecol. Conserv., 2020, Doi: 10.1016/J.Gecco.2020.E00947.

[5] P. Babashamsi, N. I. Md Yusoff, H. Ceylan, N. G. Md Nor, And H. S. Jenatabadi, "Sustainable Development Factors In Pavement Life-Cycle: Highway/Airport Review," Sustainability (Switzerland). 2016. Doi: 10.3390/Su8030248.

[6] I. Burlini And G. Sacchetti, "Secondary Bioactive Metabolites From Plant-Derived Food Byproducts Through Ecopharmacognostic Approaches: A Bound Phenolic Case Study," Plants. 2020. Doi: 10.3390/Plants9091060.

[7] B. Y. Hittini And A. I. Shibeika, "Construction Waste Management In Uae: An Exploratory Study," Wit Trans. Ecol. Environ., 2019, Doi: 10.2495/Sc190581.

[8] C. L. L. Lau, Z. Bergman, And M. M. Bergman, "Environmental Protection And Corporate Responsibility: The Perspectives Of Senior Managers And Cxos In China," Sustain., 2019, Doi: 10.3390/Su11133610.

[9] S. G. Sutton And R. C. Tobin, "Social Resilience And Commercial Fishers' Responses To Management Changes In The Great Barrier Reef Marine Park," Ecol. Soc., 2012, Doi: 10.5751/Es-04966-170306.

[10] Y. Bo, N. Mesner, M. Drew, And D. Durfee, "Integrated Teaching And Practice: Green Infrastructure Planning And Green Roof Performance In A Semi-Arid Campus Environment, USA," Landsc. Archit. Front., 2018, doi: 10.15302/j-laf-20180504.

CHAPTER 14

A BRIEF STUDY ONWORLD HERITAGE SITE MANAGEMENT PLANS

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ABSTRACT:

World Heritage Sites are revered around the world for their great cultural and ecological significance, and to guarantee their preservation, protection, and sustainable development, they need to be managed with effectiveness. The significance and essential elements of management plans for World Heritage Sites. The introduction of the abstract emphasises the importance of World Heritage Sites as exceptional displays of human ingenuity, cultural variety, and natural beauty. According to the UNESCO World Heritage Convention, these locations are acknowledged and safeguarded in an effort to conserve them for future generations. Plans for managing World Heritage Sites are crucial for their preservation, protection, and sustainable development. These plans provide a framework for maintaining the exceptional universal significance of World Heritage Sites and fostering their long-term sustainability by embracing the crucial elements mentioned above. The next parts of this essay will examine case studies and best practices in management plans for World Heritage Sites, emphasizing effective strategies and lessons gained.

KEYWORDS:

Crucial, Development, Heritages, Management, Sustainable.

INTRODUCTION

World Heritage Sites need efficient management strategies to guarantee their preservation, protection, and sustainable development because of their exceptional universal importance. These locations are on the UNESCO World legacy List, indicating their importance on a worldwide scale, and they embody the cultural and natural legacy of mankind. The relevance of World Heritage Site management plans is discussed in the opening of this document, along with an outline of the major factors that go into developing them. The importance of World Heritage Sites is emphasized in the introduction's first paragraph as unique, priceless assets with enduring worth. These locations include archaeological sites, historic cities, monuments, national parks, and distinctive ecosystems. They also include a broad spectrum of cultural and natural landscapes. An area is recognized for its unique features and the need to protect it for future generations when it is inscribed as a World Heritage Site [1], [2].

The introduction emphasizes the need of efficient management strategies to handle the intricate problems that World Heritage Sites must deal with. Threats including climate change, urbanization, tourist demands, insufficient conservation practices, and tensions between conservation and development are a few examples of these difficulties. The preservation of the site's values and the demands of the surrounding communities and the larger society are balanced through a well-designed management plan, which offers a roadmap for sustainable management.

The main factors involved in creating management plans for World Heritage Sites are also covered in the introduction. The determination of the site's exceptional universal value, the evaluation of threats and challenges, the formulation of conservation strategies, the involvement of stakeholders, sustainable development methods, monitoring and evaluation systems, the development of capacity, and the mobilization of resources are some of these factors. The introduction also emphasizes the relationship between cultural and environmental elements in World Heritage Sites. It highlights how crucial it is to have an integrated, comprehensive strategy that acknowledges the interdependencies between cultural heritage, natural heritage, and the people who call these places home. Overall, the introduction lays the groundwork for the paper's remaining parts, which will focus on individual case studies, best practises, and takeaways from management plans for World Heritage Sites. The document seeks to provide insights and recommendations for the efficient administration of World Heritage Sites in order to ensure their preservation and sustainable development for future generations [3], [4].

DISCUSSION

In light of this, English Heritage and collaborators like the National Trust have begun creating World Heritage Site (WHS) management plans for all of the U.K. mainland's sites, including Avebury and Stonehenge. These adhere to and in fact expand upon the World Heritage Center's existing guidelines and the most recent best practises for site management, including those created in Australia by James Semple Kerr. It was agreed that Stonehenge and Avebury would have their own management strategies. The corresponding WH S implementation plans are thus considered as the primary force behind sustainable management, with these plans serving as the basis for a more sustainable management regime. In 1998, we released the management plan for Avebury WH S, and in 2000, we did the same for Stonehenge. We understood that relationships were required in order to produce these strategies. We made sure the general public had the opportunity to provide feedback at several points during the creation of the plan by including as many people and organisations as we could in a number of methods.

For instance, the Stonehenge Management Plan committee, which received reports from multiple working teams, had representation from forty different people and organisations. A draught was created after much discussion and preparation and sent to 400 people and organisations locally, nationally, and worldwide. In addition, 13,000 consultation booklets were printed and sent out to each family in the region to inform them that the consultation draught was available. These were supported by public meetings, and press briefings as well as general public and specific interest group meetings were often conducted. The replies from the consultations were then taken into account, and adjustments were made to the report's drafting where necessary [5], [6].After the plans were released, this network changed into one that is currently in charge of managing the implementation process and assessing the priorities for these programmes. Copies of the management plans for Avebury (Pomeroy 1998) and Stonehenge (English Heritage 2000) have been extensively distributed by English Heritage via a variety of channels, including placement.PDF copies online and CD-RO M versions printed. UNESCO established a framework of four major issues that need those are further separated into chapter headings that will be covered in management plans. The structure of Stonehenge is as follows.

(1) Description and Significance of the WHS

a) Locational Information

b) Significance of the WH S

c) Existing Character of the WH S

d) Current Management

e) Planning and Policy Framework

(2) Evaluation of Key Management Issues

a) Context

b) Landscape Setting of Archaeological Features and Their Management

c) Public Access and Sustainability

d) Opportunities and Constraints on Future Management

(3) Management Objectives

a. Vision for the Future

b. Overall Long-Term Objectives

c. Statutory and Policy Objectives

d. Sustainable Landscape, Nature and Heritage Conservation Objectives

e. Sustainable Tourism and Visitor Management Objectives

f. Sustainable Traffic and Transportation Objectives

g. Research Objective

(4) Implementing the Plan

a) Mechanisms for Implementation

b) Programme of Action

c) Monitoring and Review

You will have noticed that the word "sustainability" appears in a few of the plan's chapter headers. I now want to talk about how we started incorporating sustainability concepts into the development and execution of the WH S strategy. While it must be acknowledged that there are more comprehensive and long-term sustainability agendas that can and should have an influence as well, such as the European Community's Common Agricultural Policy or even the Kyoto Accord, we have limited ourselves to those elements where influence can be brought to bear [7], [8]. There are, in my opinion, five essential components to comprehending and creating a sustainable management regime for a cultural landscape:

1. Inventory and Documentation, including historical, administrative, and physical elements.

2. Analysis, leading to the assessment of the current condition and cultural, economic, and social significance.
3. Research, which supports the whole process and helps develop and test management, conservation, and interpretation measures.
4. Comprehension, collaboration, and cooperation with people and groups to forge consensus.
5. Monitoring and reviewing, namely, the components of the management plan and the application of fresh and old strategies.

These are shown in a linear format. To create a fully dynamic system, a number of intermeshing cycles must occur for the various features of the landscape under study. These cycles are not limited to the interests of one professional group or one specific management discipline, but rather are considered as both multidisciplinary and transdisciplinary.Sustainability can only be approached if one starts to build comprehensive approaches to understanding and managing environments.

Inventory and Documentation

It is important to develop an inventory, or a set of connected inventories, that allows for the documenting of the many elements that make up the landscape in a landscape as varied as that found at Stonehenge or Avebury. These inventories have to include administrative, historic documentation, demographic, economic, and managerial components in addition to cultural and physical ones. It is crucial to understand how we came to have the things we are trying to manage and preserve into the future, thus wherever it is practicable, each of these individual components should be given a time-depth factor. For instance, it's crucial to comprehend how previous farming methods may have changed the landscape, not just in overt ways like visible crops, hedges, and field boundaries, but also in covert ways like water extraction, the use of chemical fertilisers, or land drainage [9], [10].

Analysis

Understanding what is present and whose it is does not enough. Understanding how our environment came to be helps us to appreciate how we got here. It also triggers the need for more study, starting a loop that advances our knowledge of the resource and the causes affecting it. I'll use a few instances to demonstrate these ideas. In addition to monitoring the present situation, condition assessments of the cultural resource should be conducted in order to provide a baseline of data against which further surveys may be evaluated. This enables the measurement and subsequent evaluation of both general and specific trends. For instance, burrowing animals, especially rabbits and sometimes badgers, often attempt to settle down in archaeological features because the softer material from excavated mounds is easier to dig into than virgin ground. This is not only unattractive, but it might also result in the destruction of archaeological evidence and pose a risk to tourists' health and safety.

As a balance has to be struck, site conditions must be regularly checked between the potential for harm and danger and the need to keep the grass cut in order to preserve the existing biological system. However, no matter how well maintained and recorded the site is, the unexpected is always a possibility. For instance, a shaft developed at the summit of Silbury Hill in late May 2000. This was surprising since the mound's top had just recently been excavated and had seemed stable both before and after. A hole excavated at the end of the eighteenth century, which

had only had the top few metres backfilled, had eventually fallen into the emptiness below after more than two hundred years. Although the excavations from the eighteenth century were well-known and well-documented, subsequent years have made many forget that the shaft had not been entirely backfilled. Understanding the significance of historical material such as pictures, sketches, or paintings may be extremely helpful. These media often provide a level to historical knowledge that is absent from "official" whether it be the names of previous owners on a map or the attire that was worn at the time.

Research

The frameworks that may be used to comprehend and interpret a site are developed via a combination of theoretical and practical study. Recognising that study may lead to more research is also crucial. For both Avebury and Stonehenge, English Heritage has actively supported the development of archaeological research frameworks. Only the Avebury framework has been made available so far (AA&HRG 2001). These frameworks are compatible with English Heritage's larger ambition to develop national-scale regional research frameworks (Olivier 1996). The Avebury ditch was excavated in the 1920s, revealing its tremendous physical size and accompanying buildings, as well as how much they had corroded or shrunk over time. The British Academy founded the Experimental Earthworks Research Committee in the 1950s as a result of cases like this and several more occurring in the UK (Bell, Fowler, and Hillson 1996). The committee was made up of a diverse group of scientists who developed the project's ideas and carried them out. The study was started because, despite the fact that the ditch had been filled in on a macro scale, we were unable to fully comprehend the processes that led to it or the time frames in which it occurred.

On Overton Down, close to what would eventually become the eastern border of the Avebury World Heritage Site, the experimental earthwork site was located. It was made up of a section of ditch and an adjoining rampart that were built according to a set of uniform specifications. A variety of measurement techniques were integrated, as well as material to simulate the archaeological materials found in excavation sections. The earthwork was then divided into sections at 2-, 4-, 8-, 16-, and 32-year intervals, and it will be divided once more in 2064 and 2028, respectively. 2024 and 2088. To cut a long tale short, the findings from this experiment have proven crucial in management as well as archaeological terms. Research must take into account other variables, such as the transportation infrastructure, in addition to only cultural relics. Roads have an impact on important monuments at both World Heritage Sites, particularly at Stonehenge, where a major trunk road, the A303, has to be upgraded to dual carriageway and this road and another smaller one work together to shut off the stones from the surrounding environment.

Similar to this, it's important to acknowledge the requirements and preferences of the millions of users to the sites each year. In the UK, tourism is a significant business that contributes more than £25 billion to the economy, and popular tourist destinations include Stonehenge and Avebury. About half of all visitors to Stonehenge are from outside the country. They not only bring money to the attractions, but they also bring money into the nearby stores, eateries, motels, and guesthouses. Along with infrastructure like parking and restrooms, they also need site information.

Last but not least, I must bring up agriculture, which is sometimes seen as the opponent of studies of the landscape. We must become more intelligent and acknowledge the enormous role

that agriculture has had in shaping the environment of today. In fact, there is proof that farming has been in this region of England for at least 5,000 years. We must also acknowledge that, in its quest for self-sufficiency since World War II, the United Kingdom has permitted agriculture to trump many cultural and environmental considerations, creating an unsustainable system.

As a result, one of the repercussions on the visible cultural remnants has been "ghetto" preservation, such as barrows that have been walled off from farming and are not actively managed in the enclosed spaces or accessible physically.Animal infestation and brush regrowth may result from this. This is starting to change, however, as everyone involved in the management and future of the countryside is taking a more comprehensive approach and appreciating the various components that make up the countryside. Cultural, economic, social, and environmental considerations must all be made when creating replacement management regimes that favour certain landscape features. In "limits of acceptable change" modelling, different weights may be assigned to specific components while keeping those elements that are seen as crucial. This is one approach to portray these seemingly contradicting considerations. I don't want to detail this process here, but it is important to note that using a Geographic Information System (GIS) makes it possible to compare data fairly easily and utilise that data in more intricate models (like LAC models).

CONCLUSION

The preservation, protection, and sustainable development of these extraordinary cultural and natural resources are all made possible by world heritage site management plans. We have examined the significance of these plans and the crucial factors involved in their creation throughout this essay. The identification of possible dangers and difficulties, as well as a thorough comprehension of the site's exceptional universal significance, are necessary for developing effective management strategies for World Heritage Sites. The ecological and cultural characteristics of the site, as well as the requirements and viewpoints of stakeholders and the local community, should all be taken into consideration when developing conservation plans. Stakeholder involvement and engagement are essential components of the management planning process. Management plans may combine many viewpoints, assure inclusion, and promote a feeling of ownership and stewardship by including local communities, indigenous groups, site managers, and other stakeholders. The management plans should include sustainable development concepts in order to strike a balance between conservation goals and social, economic, and environmental factors. While minimising detrimental effects on the site, this includes fostering sustainable tourism, bolstering local economies, and boosting community well-being. Mechanisms for monitoring and evaluating progress, determining the status of conservation.

Altering management techniques as necessary are essential. Regular monitoring enables the prompt detection of hazards and the adoption of suitable remedies to guarantee the site's long-term viability. In order to enable site managers, local communities, and stakeholders to actively engage in the administration and protection of World Heritage Sites, capacity development and education efforts are crucial. These people and organisations become ardent defenders of the site's preservation and contribute to its long-term viability by expanding their knowledge and capabilities. Planning for finances and securing resources are crucial parts of management strategies for World Heritage Sites. Effective execution of the initiatives specified in the plans depends on securing sufficient money from a variety of sources, including governments,

businesses, and international organisations. Plans for managing sites designated as world heritage sites are essential for preserving their exceptional significance on a global scale. These plans provide a road map for the responsible and sustainable management of World Heritage Sites by taking into account the distinctive cultural and natural qualities, involving stakeholders, supporting sustainable development, monitoring progress, developing capacity, and obtaining essential resources. These locations may continue to inspire and instruct future generations while maintaining the worldwide history they stand for with the right application.

REFERENCES

[1] S. World and H. Site, "Stonehenge World Heritage Site Management Plan," Management, 2000.

[2] A. Barreca, R. Curto, and D. Rolando, "An innovative methodological and operational approach to developing Management Plans for UNESCO World Heritage Sites: A Geographic Information System for 'Ivrea, industrial city of the 20th century,'" Aestimum, 2017, doi: 10.13128/Aestimum-22727.

[3] C. Landorf, "A framework for sustainable heritage management: A study of UK industrial heritage sites," Int. J. Herit. Stud., 2009, doi: 10.1080/13527250903210795.

[4] R. Armis, R. Gino SG, and H. Kanegae, "Risk Assessment and Disaster Preparedness of Museums in Ombilin Coal Mining Heritage of Sawahlunto , Indonesia," J. Disaster Mitig. Hist. Cities, 2020.

[5] M. C. Ang, C. P. Looram, and V. Chimalapati, "Community archaeology in Sia Boey Integrated Management Plan, Malaysia," J. Community Archaeol. Herit., 2020, doi: 10.1080/20518196.2020.1767386.

[6] R. Cheris, R. Repi, and D. Amalia, "Sustainable Conservation of the Coal Mining Town: Ombilin Sawahlunto West Sumatra Indonesia Context," in IOP Conference Series: Earth and Environmental Science, 2020. doi: 10.1088/1755-1315/469/1/012068.

[7] F. Badia, "Contents and aims of management plans for world heritage sites," ENCATC J. Cult. Manag. Policy, 2014.

[8] P. Gullino, G. L. Beccaro, and F. Larcher, "Assessing and monitoring the sustainability in rural world heritage sites," Sustain., 2015, doi: 10.3390/su71014186.

[9] S. Kim, "Tourism impacts continuity of world heritage list inscription and sustainable management of Hahoe Village, Korea: A case study of changes in tourist perceptions," Sustain., 2019, doi: 10.3390/su11092573.

[10] W. J. Affelt, "Problemy Zarządzania Miejscem Światowego Dziedzictwa Unesco Na Przykładzie Planu Zarządzania Dla Kościołów Pokoju W Jaworze I Świdnicy," Prot. Cult. Herit., 2017, doi: 10.24358/odk_2017_04_10.

CHAPTER 15

SUSTAINABLE MANAGEMENT FOR ARCHAEOLOGICAL SITES: THE CASE OF CHAN, PERU

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ABSTRACT:

The preservation and long-term survival of archaeological sites, especially those of exceptional cultural importance, depend on sustainable management. In order to examine sustainable management strategies for ancient monuments, this abstract focuses on the instance of Chan Chan, Peru, the largest adobe city in the world and a UNESCO World Heritage Site. The introduction of the abstract emphasises Chan Chan's value as a unique cultural heritage site with elaborate architectural details, mural art, and a significant historical past. Chan Chan, however, must contend with a number of issues, such as environmental deterioration, the effects of climate change, pressure from the tourist industry, and insufficient infrastructure. The long-term preservation and survival of archaeological sites like Chan Chan in Peru depend on sustainable management techniques. The distinctive cultural legacy of Chan Chan may be conserved for future generations by putting into practice measures like conservation and preservation, environmental management, community participation, sustainable tourism, research and monitoring, and cooperation. As part of the global effort to preserve cultural assets and promote sustainable development, Chan Chan's sustainable management may serve as a helpful example for other archaeological sites across the globe.

KEYWORDS:

Archaeological, Conservation, Conservation, Preservation, Site.

INTRODUCTION

Understanding the pre-Hispanic cultural development of the Central Andes in pre-Hispanic periods requires knowledge of CHAN CHAN, one of the largest clay construction towns in the Americas. Between the ninth to the fifteenth centuries A.D., the Chimu kingdom's capital's ruins may be found at the archaeological site. It is situated five km from Trujillo, a city on Peru's northern coast, on the northern edge of the Moche Valley. The Archaeological Complex formerly covered twenty square km, but only fourteen of them are still standing today. The remaining eight square kilometres make up the agricultural and rural zoneSo in Figure 1, while six of the latter are located in the centre urban zone, where nine palaces were constructed as standalone structures. The earliest chronology, presented by Topic in 1978, was amended by Kolata in 1982 based on new discoveries. The cultural history of Chan Chan spans a period of 650 years and has been mostly substantiated by archaeological studies. Archaeological research yields a wealth of knowledge, but ethnohistoric data such as official and judicial records from For the purpose of interpreting the site's cultural history, the myths about the Chimor dynasties that were documented in the seventeenth century and those from the sixteenth century have been

particularly helpful. We may conclude from this knowledge that Chan Chan summarizes the cultural development of the Central Andes, notably on the northern coast of Peru. The most important features of Chim society, including its social, ideological, political, and economic structure, as well as subsistence tactics, are shown. Since the site was the major hub of a vast state that had a significant effect, it may be used to analyse the development of the city as well as the cultural processes in the Moche Valley and the surrounding area. So in Figure 2 These remnants are seen in the subject cities and regions' architectural and cultural structures [1], [2].

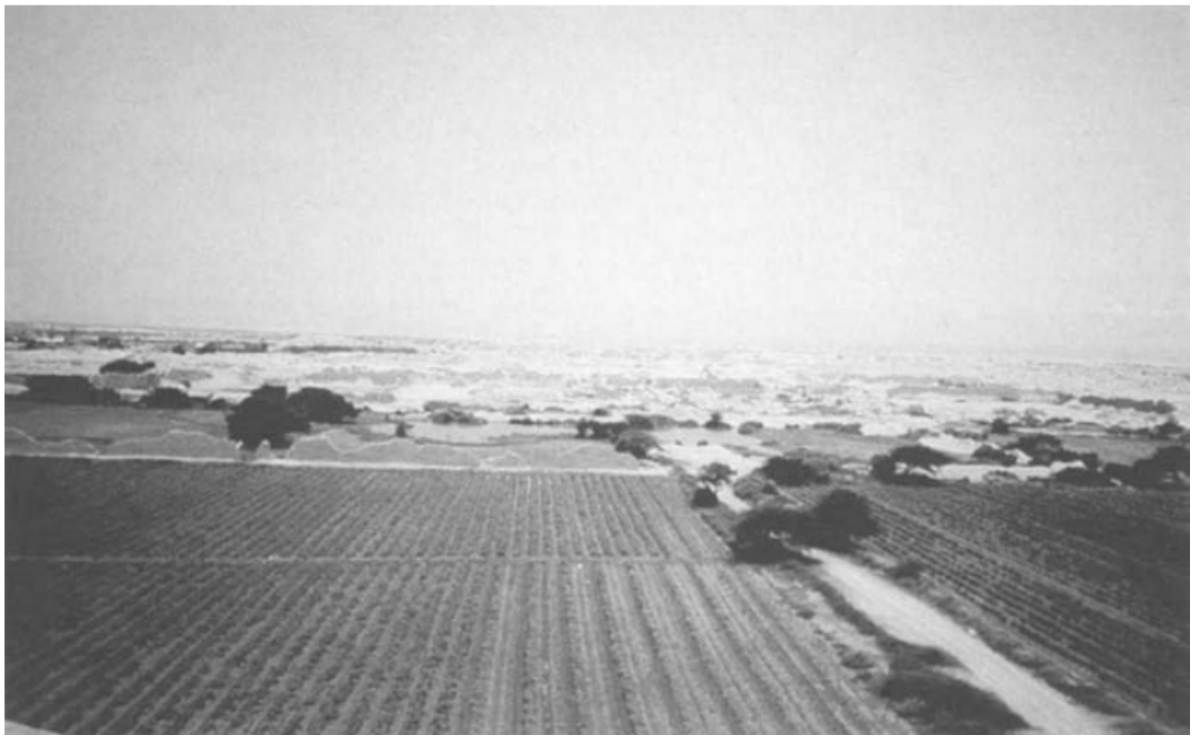

Figure 1: General view of the archaeological site and surrounding agricultural fields. Photo by Carolina Castellanos.

DISCUSSION

A reflection of the interaction between the ancient people and the environment may be seen in the management and organisation of space, which merges architecture with adorned surfaces, as well as its structure, design, shape, and distinctive traits. The expansiveness of space, raised buildings, and the use of ornamented surfaces were all highlighted in earthen architecture, which was modified to meet a variety of purposes. In terms of science, Chan Chan is a crucial reserve for comprehending the development and past of the communities along Peru's northern coast. Studies of pre-Hispanic agricultural development and research into earthen architectural technologies still provide knowledge that is relevant to today's applications. Chan Chan also serves as a symbol of identity, continuity, Figure 2,and a clear connection between the past and present for the numerous local and regional cultural groups. Its importance is still present in the methods of building and materials used for earthen architecture, in the utilization of land and water for commercial and subsistence activities, as well as in traditions and beliefs that have persisted through time. It also holds great promise for the region's social, cultural, and economic

growth. The location also offers significant educational value for archaeology and the preservation of earthen construction [3], [4].

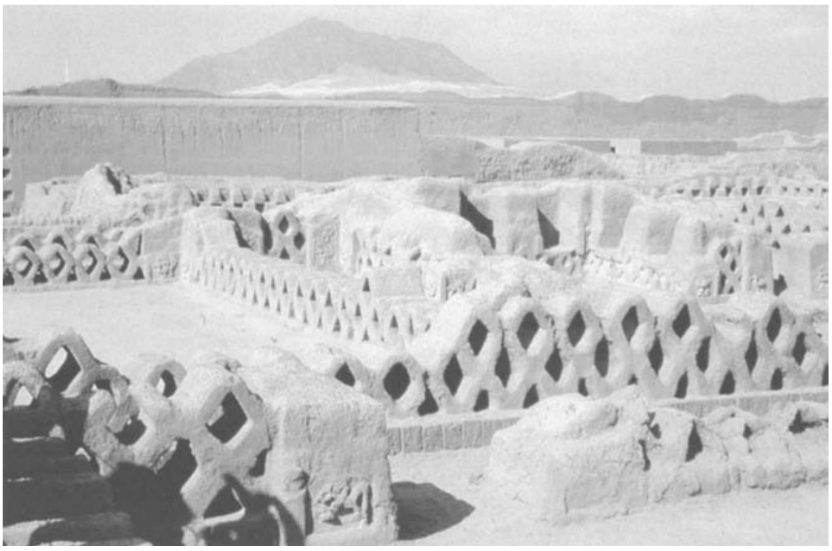

Figure 2: General view of the Tschudi Palace, Audiencias sector. Photo by Carolina Castellanos.

Conditions at the Site

The preservation of Chan Chan's archaeological site is fraught with difficulties ranging from fabric degradation to concerns with context. Due to its position, the Archaeological Complex is susceptible to the dynamics of environmental elements that constantly interact and contribute to the increasing loss of building materials as well as the degradation of structures and adorned surfaces. Wind and insulation are two of these causes, but historically, it was probably the recurring occurrence of El Nio that led to the most significant damage; heavy downpours, floods, and mudslides devastated a sizable portion of the archaeological site. The administration of the site and its social environment, especially in the site's vicinity, have contributed to the deterioration of Chan Chan's archaeological legacy. The loss of historic remnants has been prompted by pressure from neighboring populations brought on by urban development and agricultural and industrial output. Additionally, the landscape is impacted by the ongoing extraction of dirt for the production of adobes.

The buildings at the site have deteriorated and been looted as a result of the nearby populations' low-income levels, which has been made worse by the site's open access. The region is renowned for the excellent quality of its textiles and ceramics, which regrettably are very highly regarded in both public and private markets. Additionally, adobes which are often used in building in new communities in the region lead to structural issues, eventual collapse, or loss of structures. Without visitor control mechanisms in place, tourism has undoubtedly contributed significantly to the site's decline. Over the last 35 years, the Peruvian government has carried out a number of initiatives for the study, protection, presentation, promotion, and defence of Chan Chan in an effort to solve some of these issues. Legislation for the site's protection is being drafted, and there will be interventions for the recovery of unlawfully occupied agricultural and industrial areas. The Chan Chan Archaeological Complex was added to the World Heritage List in 1986

under Criteria C . That same year, due to the unstable condition of the earthen building, it was given the status of World Heritage in Danger [5], [6].

All excavation activity should stop until it is supported with conservation, according to the World Heritage Committee's recommendations for management, restoration, and conservation measures. Additionally, it urged that all efforts be made to prevent looting at the location . Chan Chan's palaces and huacas have undergone conservation and maintenance since these recommendations were made, frequently in cooperation with international and national organisations. Among them, the creation of the Site Museum in 1990 and the preventative measures against the El Nios of 1982, 1989, and 1997 were particularly significant. The rehabilitation of regions that had been overrun by industrial and agricultural facilities has also received a lot of attention; this recovery was finished in 1998. These initiatives did not, however, produce a commitment to long-term conservation measures or wider societal or political support. A proposal titled "Plan integral para la defensa y conservación de Chan Chan Patrimonio Mundial" was created by the Instituto Nacional de Cultura de Per-Dirección Regional La Libertad and presented to the Ministry of Education in 1996. It called for management of the site that included protection, conservation, research, presentation, dissemination, and education. The Panamerican Course on the Conservation and Management of Historical-Archaeological Architectural Heritage , which was conducted at the site and the museum facilities as part of the plan, took place there from November 10 to December 13, 1996.

The INC-DRLL, the International Centre for Earth Construction-School of Architecture Grenoble, the Getty Conservation Institute, and the International Centre for the Study of the Preservation and Restoration of Cultural Property , with the collaboration of the World Heritage Fund and the support of other official and private entities, developed the course through international technical cooperation. The course emphasized integrated training activities for the conservation and management of earthen architecture and put a big focus on planning. It was created for professionals concerned with earthen architecture conservation and building throughout Latin America. The organizing institutions promoted a methodology that encouraged an interdisciplinary and inclusive planning process for that reason. Chan Chan's management plan technique and significant participant suggestions were produced through the training. The Peruvian government was advised to implement a management plan for Chan Chan as a condition for its designation as a World Heritage Site and World Heritage in Danger in 1997, at the general meeting of UNESCO's World Heritage Committee in Naples, Italy. In this context, coordination between the INC-DRLL and the UNESCO officials in Peru was formalized in order to create the Chan Chan master plan. The project was given priority by the Peruvian government in accordance with its cultural strategy, and between January and December 1998, the INC-DRLL began the planning phase with assistance from the World Heritage Fund-UNESCO, ICCROM, and the Getty Conservation Institute [7], [8].

The Planning Process

The management planning project was built on a comprehensive, inclusive, value-driven strategy that would address not just the archaeological site's and its decorated surfaces' conservation requirements but also problems relating to the surrounding environment and social context. The primary goal of creating the plan was to incorporate activities done at the site into a comprehensive and planned action strategy that aimed to preserve the values that make Chan

Chan a special place while also promoting heritage as a crucial element for human development and well-being by producing both tangible and intangible benefits.

Additionally, it was believed that a set of predetermined activities would help to maximise the few financial, material, and human resources by allocating them to pressing requirements. Planning for the site promoted the active involvement of various stakeholders, which would result in a broader commitment and support for both conservation efforts and the overall implementation of the plan. This was done in light of the complex issues related to the conservation and management of the site and in accordance with the significance-driven process. The participatory method made it possible to negotiate and resolve a variety of concerns, from archaeological research to conservation, presentation, teaching, promotion, zoning, and land use in accordance with the values that were prioritised.

Chan Chan's planning process was divided into three stages: study and documentation, analysis, and response, which included, in turn, identifying the location, analysing the surrounding circumstances, determining its cultural significance, defining the site's policies, So inFigure 3 and finally developing programmes and specific projects. Additionally, the process included developing an implementation strategy and specifying monitoring criteria for the plan's assessment and updating. In actuality, the strategy required many stages of discussion. and comprehension of several challenging situations. In order to develop solutions that would be most successful over the long term, focus was put on the critical investigation of several components, ranging from fabric conditions to context difficulties, as well as on finding and recognising interdependencies.

In this regard, thorough evaluations were crucial for gathering the necessary data; these were carried out by experts from a variety of disciplines using techniques and methodologies that were specific to each field and made use of the resources at hand. In order to react to vulnerabilities and better predict changes in the future, the assessments that followed allowed for the characterization and identification of major concerns that affect or contribute to changes at the site. But in addition to being critically examined, these conditions also had to be balanced against the site's values as seen from a variety of angles and the requirements of other interest groups, taking into account the variety of values and uses that are fundamental components of various cultures. Although Chan Chan is important in many ways and to many different cultures,Figure 3, it also has very particular requirements. For instance, the nearby municipalities and local governments anticipated that increasing tourists would help the monument and the area economically [9], [10].

It was important to understand the underlying interdependencies and related vulnerabilities of the site as well as how they affected people's perceptions and values of the location. In this regard, emphasis was put on developing efficient mechanisms and strategies for collaboration that allowed the identification of additional needs derived from the site and their potential articulation in the plan as well as to increase awareness of the needs related to the site's fabric. Therefore, it was essential to jointly plan and coordinate activities in order to advance a vision for Chan Chan's future, in which the suggested strategies and projects related not only to the conservation of the archaeological site but also to the ultimate goal of human well-being and human development. Chan Chan is crucial to the lives of the local community in fostering cultural identity, a feeling of the past and its link to the present, and social cohesiveness, as became obvious via discussions about the site's importance. It was specifically explored how to capitalize

on the site's significance for the scientific community and how to develop the site in a manner that would allow it to be linked with the broader development of the Moche Valley.

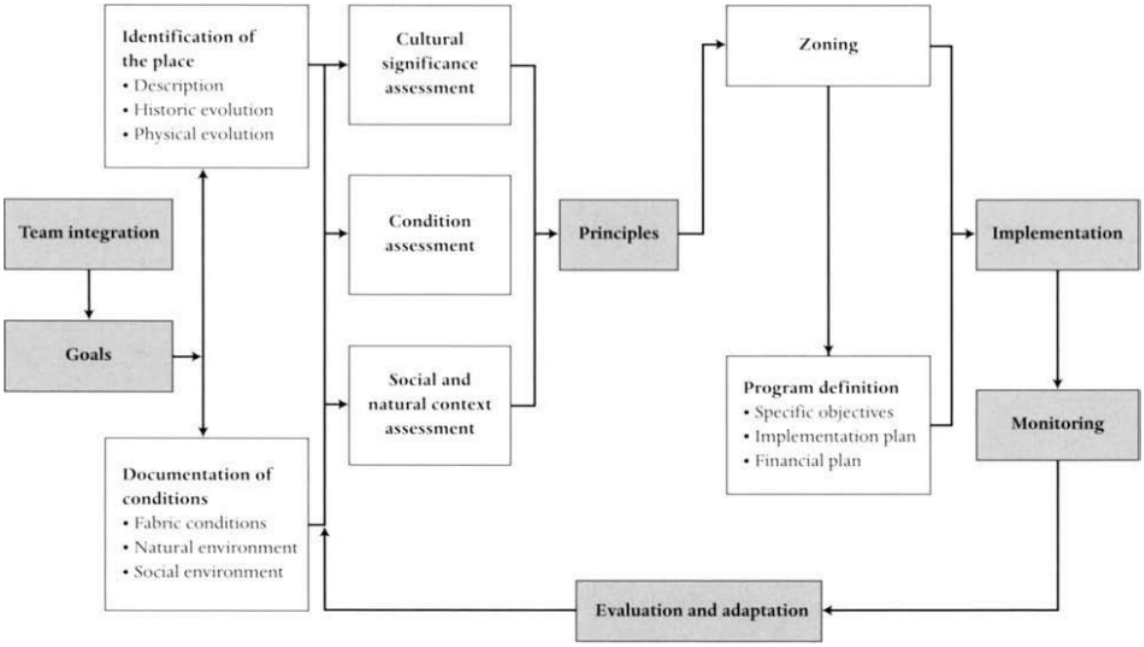

Figure 3: Planning process for the development of a master plan for Chan Chan[getty].

Several examples of the regulations set out in the management plan include

1. Integration of the Archaeological Complex with nearby communities' economic activity, such as industrial and agricultural growth;
2. Respect for and encouragement of traditional knowledge and practices for the advancement of cultural development as well as the support of educational and outreach initiatives;
3. Promoting the Archaeological Complex as a focal point for the area's cultural growth; and
4. Placing a priority on conservation efforts in the intense and extensive usage zones and emphasizing minimal intervention in order to open up additional spaces to the public.

Through a number of initiatives, some of which are briefly discussed here, the consequences of these policies and the methods for putting them into practise have been identified.

Zoning is a crucial component of the plan and is based on the INC-DRLL's original concept, which was studied by the many areas that would be impacted by it both geographically and in terms of the intended uses and restrictions. The Municipality of Trujillo authorised the final zoning proposal in line with its Metropolitan Development Plan in order to make certain planned uses practical. Zones were set up in relation to how the area was used as well as how activities and interventions were given priority. Conflicts over the area in the protected area and in the buffer zone were first resolved because infrastructure and particular management operations were collaboratively determined. Restricted usage, intense use, extensive use, special use, and

buffer zone were the designated use zones. The latter two were very important to Chan Chan. It was decided that in the special-use zone, the huachaques, which were pre-Hispanic agricultural regions, might continue to be used for farming, and that totorales, a rush species typical to Peru's northern coast that thrives in soils with a high level of These ideas would be watched over by the INC and other concerned bodies. High concentrations of salts would be retrieved to balance the demands of the agricultural communities with the preservation of the site. A significant endeavour put out by the is also connected to the project for the totorales. Ecosystems along Peru's northern coast will be restored by the ministry of agriculture and natural resources. In accordance with established regulations, projects were created for each zone, focusing on the problems that were seen as priority while also advancing the site's long-term goals. In the end, seven programmes were created for the management and protection of Chan Chan, along with twenty-four subprograms and 140 initiatives. Despite the fact that suggested projects include the preservation of ancient buildings and decorative surfaces, future scientific study, and collection preservation, projects were also specified for the preservation and promotion of other values, for instance.

1. A centre for the recovery of traditional technology, which is being proposed as a joint venture between the INC and the National University of Trujillo and would include traditional handicrafts such earthen building construction, textiles, and pottery.
2. Encouragement of the cultural growth of neighbouring towns, including urban planning, environmental protection, and housing regulations
3. Enhancing formal and informal education, including via site-based activities as well as curriculum creation at different educational levels on topics including the area's cultural past and the expertise of architects, agronomists, and engineers
4. Promoting alternative uses and endeavours like agriculture and restoring natural regions for resource production

In order for the findings of scientific investigations to successfully contribute to the interpretation and knowledge of the past as well as the wellbeing and development of the current and future generations, special focus was made on connecting these studies to other initiatives. According to zoning, efforts for the growth of the tourist industry included studying, conserving, and showcasing places in the extensive-use zone.

CONCLUSION

The management of Chan Chan is currently suggested as a more full articulation of the preservation of natural and cultural heritage as well as the integration of heritage with society to encourage and contribute to sustainable development as a consequence of the approach applied. By using a value-driven approach, the suggested plan went beyond only the physical aspects of the site and addressed social and economic concerns that affect how various social groups perceive and understand history as well as ways to make them directly benefit from it. the preservation of the site The strategy aims to identify the interrelationships between diverse social, cultural, and natural elements as well as the interaction between Adapting the suggested projects while continuing to invest in the natural, human, and social capital and by assuring involvement in the decision-making process for the growing cultural systems will give you the greatest chance of managing future changes.

Another goal was to support the development of the region's ability to carry out further planning activities as well as execute the final product. To ensure the initiative's long-term multiplicative impact and to create a strategy that would be compatible with Peru's present political, technological, and administrative circumstances, it was crucial to assemble a team with local expertise. The planning process's monitoring enabled for its adaption for training reasons and offered a starting point for the methodology's application to planning efforts at additional earthen sites. The project has promoted a deeper understanding of the significance of the site and its importance at the national level, especially as an element that contributes to national security. The participatory approach and consultation with a wide range of stakeholders allowed the goal of collaboration to be advanced. The active participation of diverse stakeholders allowed for the reconciliation of many of the interests surrounding the site, particularly with respect to tourism and industrial development. By include social actors who are crucial to project execution, the technique used has also contributed to the plan's sustainability.

A deeper feeling of responsibility and a shared commitment to conservation were established as a result of working together to plan for the site's future management, both on an institutional and a personal level. This keeps becoming stronger thanks to the consolidation of working groups, ongoing cooperation in the creation of particular initiatives, and communication of outcomes and advancement. In order to promote the preservation of the site, ongoing relationships have been created with the municipality and the surrounding community. A greater commitment to the site was fostered by making a variety of stakeholders feel like owners of the process and the finished plan, which would ultimately ensure long-term implementation and realisation of the plan's goals. Since the Instituto Nacional de Cultura cannot, in the end, be solely responsible for carrying out the management plan, provisions and policies have been established to clarify the roles and responsibilities of various stakeholders, to establish the necessary framework for the site's holistic management, and to offer ways to resolve potential future conflicts and better manage change. The capacity to modify the current strategy to deal with changes that will come about over time via tactics that eventually support the growth and welfare of various social groups will be a key factor in success. A more thorough investigation of why we preserve cultural heritage but most importantly, for whom will result from understanding the consequences and difficulties of using a method guided by values. This strategy mostly determines the plan's viability, but ultimately it also affects cultural heritage preservation.

REFERENCES

[1] M. Erdoğan and Ş. Atak Çobanoğlu, “Sustainable Cultural Heritage Management: Example of Troy Archaeological Site,” Gastroia J. Gastron. Travel Res., 2019, doi: 10.32958/gastoria.491789.

[2] N. Koren-Lawrence, N. Collins-Kreiner, and Y. (Hezi) Israeli, “The future of the past: Sustainable management of archaeological tourist sites – The case study of Israel,” Tour. Manag. Perspect., 2020, doi: 10.1016/j.tmp.2020.100700.

[3] N. Nayci, “Sustainable Approaches In Archaeological Site Management: Management Planning Studies On Aspat (Strobilos),” METU J. Fac. Archit., 2014.

[4] P. M. Bushozi, “A multiple-institution corporation’s engagement of local communities in conservation management: The case of olduvai gorge, ngorongoro conservation area (nca), tanzania,” South African Archaeol. Bull., 2019.

[5] P. Gkionis, G. Papatheodorou, M. Geraga, E. Fakiris, D. Christodoulou, and K. Tranaka, "A marine geoarchaeological investigation for the cultural anthesis and the sustainable growth of Methoni, Greece," J. Cult. Herit., 2020, doi: 10.1016/j.culher.2019.08.009.

[6] E. Vaz, "Archaeological sites in small towns-a sustainability assessment of Northumberland county," Sustain., 2020, doi: 10.3390/su12052018.

[7] P. Jerome, J. M. Teutonico, and G. Palumbo, "Management Planning for Archaeological Sites," J. Am. Inst. Conserv., 2004, doi: 10.2307/4129643.

[8] N. K. A. Astiti, "Sumber Daya Arkeologi dalam Pembangunan Pariwisata Berkelanjutan di Provinsi Maluku," Kapata Arkeol., 2016, doi: 10.24832/kapata.v12i1.312.

[9] J. De Reu et al., "Beyond the unknown: Understanding prehistoric patterns in the urbanised landscape of Flanders," J. Hist. Geogr., 2013, doi: 10.1016/j.jhg.2012.12.004.

[10] S. Al-Saad, "Sustainable Tourism Management At Potential World Heritage Sites: Land Use Analysis By Using Gis: Case Study: Jerash Archaeological Site, Jordan," PEOPLE Int. J. Soc. Sci., 2017, doi: 10.20319/pijss.2017.32.614636.

CHAPTER 16

CASTLES AND COMMUNITY IN CAPE COAST, GHANA

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ABSTRACT:

This abstract examines the connection between Cape Coast Castle, a UNESCO World Heritage Site, and the neighborhoods in Cape Coast, Ghana. The Cape Coast Castle, a prominent historical landmark connected to the transatlantic slave trade, is very important both historically and culturally. The first point made in the abstract is how crucial community participation is to the administration and preservation of cultural heritage monuments. It draws attention to Cape Coast Castle's distinctive position as a location of historical importance and current relevance to the neighborhoods. The abstract explores Cape Coast Castle's historical background, showing how it began as a trading station and became into a hub for the transatlantic slave traffic. It talks about how the slave trade affected the neighborhood and emphasizes how important the castle is as a representation of the community's history and identity. The abstract examines the many interactions that the neighborhood has with the castle. This comprises community members actively taking part in cultural events, educational activities, and historical tourist projects. Additionally, it emphasizes the significance of neighborhood groups and local stakeholders in the upkeep and interpretation of the castle.

KEYWORDS:

Coast, Castle, Community, Cultural, Neighborhood.

INTRODUCTION

The well-known Cape Coast Castle, a historical structure and UNESCO World Heritage Site that was integral to the transatlantic slave trade, is located in Cape Coast, Ghana. This introduction investigates the connection between castles, notably Cape Coast Castle, and the inhabitants of Cape Coast, emphasising the value of local participation in the administration and protection of cultural heritage monuments. The introduction starts out by recognizing Cape Coast Castle's historical importance as a representation of the transatlantic slave trade and its long-lasting effects on the neighborhood. It emphasizes the castle's function as a place of communal memory, marking a difficult period in history that continues to influence the community's identity and cultural legacy [1].

The significance of community involvement and participation in the sustainable maintenance of historic places is emphasised in the introduction. It acknowledges that local populations are significant stakeholders with strong relationships to the castle, and that their invaluable experience, viewpoints, and traditions contribute to a comprehensive appreciation and preservation of the place. The historical background of Cape Coast Castle is covered in the introduction, which traces its beginnings as a European trading port and its later usage as a

bastion for the transatlantic slave trade. It investigates how these past occurrences affected the neighbourhood and how they continue to influence social, cultural, and economic dynamics in Cape Coast. The introduction also emphasises the manner in which the neighbourhood interacts with Cape Coast Castle. This comprises neighborhood-led projects, cultural activities, educational programmes, and tourism-related ventures that seek to strengthen the neighbourhood, increase knowledge of the castle's past, and provide economic advantages to the neighborhood's citizens. The difficulties in the interaction between castles and the community are also acknowledged in the introduction.

These difficulties can include achieving a balance between maintaining the historical accuracy of the castle and catering to the needs and ambitions of the neighbourhood, as well as making sure that the economic gains from tourism are distributed fairly. The introduction lays the groundwork for future investigation of the complex connection between Cape Coast Castle and the Cape Coast, Ghana, neighbourhood. The following sections of this paper will examine case studies, best practises, and lessons learned that highlight the beneficial interactions between castles and communities and provide insights for the preservation and management of other heritage sites around the world by emphasising community involvement, empowerment, and sustainable management approaches [2], [3].

1990 and 1992 A two-phase initiative in Ghana's Central Region was sponsored by the United States Agency for International Development in 2000 with the aim of fostering business prospects related to cultural and natural resources. Phase 1 concentrated on maintaining and interpreting "national monuments" as tourist destinations. Phase 2 focused on the long-term preservation and growth of the historic neighbourhoods where the monuments were located. Here, I want to look at how the project helped the local community participate in the heritage planning process, encouraged a wider commitment to sustainability, and made the transition from site-specific conservation of national monuments to the holistic protection and development of community [4], [5].

DISCUSSION

As we continue the discussion on the cultural relativism of heritage conservation, it is critical to consider how the preservation of monuments stacks up against the defence of ancient communities, their intertwined belief systems, and their modes of daily life. The Cape Coast project sparked debate about the relative importance of intangible, sometimes hidden structures and spaces for defining settings vs concrete, physical surroundings.

The Castles

The World Heritage Sites of Elmina and Cape Coast Castles, built in the fifteenth and seventeenth centuries as fortified receptacles for gold and subsequently used as detention centres for enslaved West Africans, had fallen into neglect and decay by the second half of the twentieth century (So in Figure 1).3 Phase 1 of the project finished the restoration and interpretation of the castles in acknowledgment of their significance as markers of the transatlantic slave trade as part of a wider initiative to spur development in Ghana's Central Region. This economic growth was sparked by the emergence of the new sector of tourism [6], [7].

The castle served as the focal point of the Gold Coast's government prior to the acquisition of Government House. After the slave trade was abolished in 1808, British rulers took control of

the Gold Coast from this location. As the recently upgraded base Government House symbolised the British expanding their influence into the native society by leaving the castle and entering the town of Cape Coast, the centre of the colonial governor's activities Figure 2.

Figure 1: Cape Coast Castle. Photo by Gina Haney. . It was built by a well-known local merchant family in the 1840s, leased in the 1850s, and finally bought by the British administration of the Gold Coast. Cape Coast served as the capital of the Gold Coast government from this point on until 1872. Government House, located in the centre of downtown Cape Coast and next to Cape Coast Castle, was left to the government of Ghana upon that country's declaration of independence in 1957.

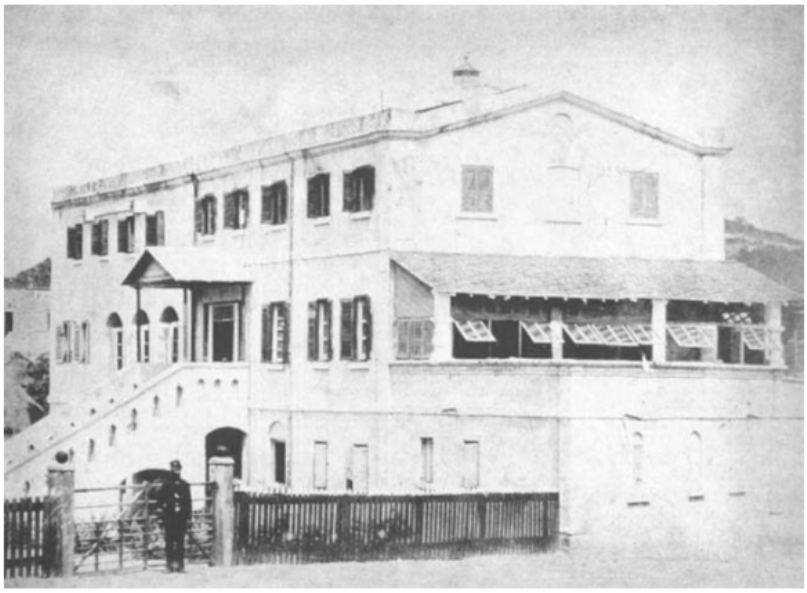

Figure 2: Government House, circa 1874 courtesy Military Museum, Kumasi, Ghana.

Ironically, Government House was restored even though it was Phase 2's opening initiative is intended to be. The repair of a colonial landmark seems to be supported by foreign assistance once again, the castle being the first example. However, as we discovered, Government House

represented more than just colonialism to Cape Coasters. Government House served as a home for a newly autonomous local government in the 1960s, housing courts and judge's chambers in its spacious entry hall and previous living areas. Government House served as a busy bus station, a hub for the widespread selling of lottery tickets, and a formal background for group photos between the 1970s until 1998, when restoration work started. Government House now had a distinct identity apart from that of the Gold Coast government [8], [9].The Central Region administration, a decentralized arm of the federal government in charge of Government House, gave its formal support and endorsement to the building's restoration and adaptive usage. The building was renovated and upgraded as part of the reuse programme to keep its public and commercial uses while making it the centre of Cape Coast's tourist services. The alteration of the structure, its paved north and south courtyards, and its terraced garden throughout the restoration process increased public awareness of conservation efforts and the recently founded GHCT. Government House was designated as Heritage House when its renovation was finished.

The GHCT, the Ghana Tour Guides Association, the Cape Coast Development Association, and a satellite office of the Ghana Tourist Board all have offices at Heritage House today. The structure also houses a business advice centre, a telecommunications facility, and local concessions for the sale of food and handicrafts. The public may visit a boardroom, a small museum that explains the history of the location and the restoration, and the garden is suitable for social gatherings like weddings and funerals. The regional administration is in charge of the rental income, which helps with building upkeep. Compared to Cape Coast CastleFigure 2, Heritage House's restoration and adaptive reuse in the townscape had a very different impact. High walls encircled the castle, so residents seldom ever saw the extensive repairs and creation of museum exhibits. A lot of Cape Coasters have also never been inside the castle, despite the fact that it is a major landmark in the city centre and is often cited as a point of reference when offering directions. Due to Heritage House's location in a public area, community members could see and access the restoration work. The operation was regularly seen by nearby residents and bystanders, who provided their own accounts of court proceedings, lottery offices, and bus timetables.

Widespread interest and support for the attentive management of additional cultural items during Phase 2 were generated by the remodelling of Heritage House. Building on this enthusiasm, US/ICOMOS and the GHCT set up a forum for a variety of individuals, including market women, imams, guardians of fetish shrines, members of municipal assemblies, and fishermen, to meet and talk about their shared heritage in terms of long-term development. This multicultural group identified key resource sites, identified issues, and suggested solutions. One month later, a week-long design charette was held in Cape Coast with the aim of analysing the data produced by forum participants. This group of locals was joined by architects, urban planners, landscape architects, preservationists, and tourism experts from Ghana and other countries. A five-year strategy for Cape Coast's growth in terms of tourism and conservation was the outcome. This scheme Visitors remained in the villages just long enough to view the enormous castles before departing to stay, dine, and shop at coastal resorts. Additionally, because the Ghana Museums and Monuments Board, a branch of the national government, received revenue from entrance fees, local and traditional authorities had no motivation to profit from the sector. The fishing industry continues to be a minor part of the economies of Cape Coast and Elmina.

A significant move of Phase 1 was the establishment of the Ghana Heritage Conservation Trust , a local organisation, with an endowment of $2 million in the United States. The GHCT was

simply a concept of Phase 1 planning, but it was tasked with the long-term protection, management, and development of cultural and natural resources in the area. Phase 2 saw the GHCT operational and employing two full-time staff members.

In 1998, USAID sponsored Phase 2 of the project after seeing the necessity to continue their original investment in the tourist industry. Phase 2, which was overseen by US/ICOMOS in collaboration with the GHCT, switched the emphasis from the preservation of national monuments to the historic villages that developed up around them, particularly Cape Coast. In the process, the concept of conservation evolved, and the built environment turned into a setting for comprehending cultural heritage.

Figure 3: Community planning forum. Photo by Gina Haney. [getty].

Included suggestions for improving and maintaining shared spaces, design guidelines for local planning authorities, potential language for new municipal legislation addressing heritage conservation, and suggestions for tourism growth in keeping with local value systems, traditions, and beliefs. The success of the plan's implementation relies on increasing public acceptance and knowledge. Gaining community support and making a number of development plan suggestions a reality required the collaboration of three entities. First, the local government included a number of suggestions in its 2000–2005 action plan, publicly endorsing the document's feasibility and pledging to handle change sensitively. Second, neighbourhood groups started requesting funding from businesses and private citizens for suggested civic improvement projects, bolstering public support for the growth plan. Last but not least, US/ICOMOS and the GHCT allocated project money to long-term planning objectives, highlighting the continuous dedication of the recently founded charity. The decision to plant 200 fast-growing shade trees

beside main roadways in the downtown area was made as a direct consequence of the charette's suggestions. Many town residents participated in the tree-planting activity, which was sponsored by the Cape Coast Development Association and the Cape Coast Municipal Assembly. The Department of Parks and Gardens and the Fire Department have been tasked by the regional administration with continuing to maintain trees over the following two years in order to support the original, long-term commitment of local government. The project is still being managed by the development associationFigure 3.

The charette's open atmosphere and endorsement for the development strategy led to sustained support for project activities, which included community theatre performances. These performances, known as concert parties, highlighted rich, regional traditions of drumming and dancing and were written by a local group in the indigenous Fante language. Over the course of eight performances spread across different neighbourhoods, almost 1800 locals showed up. Concert parties served to raise community awareness of cultural preservation while also serving as informal venues for dialogue. Residents took advantage of the opportunities to interact with local leaders and express their thoughts on a variety of problems, such as sanitation, AIDS, and heritage protection, since municipal assembly and traditional council members were present at each event [10], [11].

Figure 4: Public art installation, fish market. Photo by Gina Haney. [getty].

Individual and group engagement in the planning process was further increased by the creation of community monitoring committees in responsibility of organising and carrying out certain programmes. Teams were established to oversee certain efforts, such as the installation of public art and a modest grants programme for the renovation of cultural sites. These initiatives were administered by members of the Ghana Museums and Monuments Board, the Traditional Council, local authorities, and the Cape Coast Development Association. Under the direction of the regional director of the Centre for National Culture, public art installations in downtown Cape Coast drew attention to ongoing customs and cultural landmarks. Young citizens who are

interested in making crafts helped seven local artists make batik, sculpture, wood reliefs, and murals. Figure 4,Now that the installations may be enterprises like vacation rentals in homes. By the end of Phase 2, this programme had restored seven shrines that expressed conventional religious practises, eleven family homes, and one cemetery. The initiative launched a guide training and licencing programme for residents of the Central Region in an effort to promote local employment. Twenty Cape Coast residents who had completed the programme started offering walking tours of the downtown area and other adjacent towns and places, some of which started from Heritage House.Figure 5 As more people take these trips to learn more about the bigger town around Cape Coast Castle, this microbusiness is thriving. The GHC T still supports this company's marketing, sales, and promotion efforts.

Figure 5: Project staff and representative of Barclay's Bank Photo by Joseph Koomson. [getty].

Sustainable Conservation of the Built Environment

although working on the project, it became clear that although many Cape Coasters were interested in preserving their legacy, others still preferred to construct new, contemporary structures in lieu of older ones. The custom of judging a building's shape to be less deserving of preservation than the name or family crest tied to it reveals a persistent history of honouring and remembering forebears.

A greater knowledge of the preservation of the tangible, or constructed environment, may be sparked by addressing the conservation of such intangible forms of cultural heritage and their contribution to memory. When we take into account shrines that represent conventional religious practises, the intricacy increases. In Cape Coast, natural resources like water, rocks, and trees that are enclosed inside or bounded by the built environment are home to fetish or traditional

gods. According to Cape Coasters, there are times when fetishes occupy humans and animals, wandering about and actively taking part in ritual and parade. These materials are revered by fetish priests. employing modern materials to build walls and shelters . Priests and practitioners impose modern values on traditional religion as a consequence of marking and drawing attention to fetish in this manner, which is significant in a community with a growing number of Christian houses of worship. On the one hand, Cape Coasters maintain the tradition of erecting fresh, contemporary structures to honour and remember their ancestors. Contrarily, Cape Coasters uphold historic religious traditions by safeguarding and enhancing antiquated resources.

Both approaches show two complex but divergent approaches to addressing the past via heritage protection. A more sustainable approach to the conservation of the built environment may be achieved by balancing these and developing a paradigm in which the preservation of the tangible and intangible coexist. Two unanticipated actions undertaken by community leaders in the midst of these systems helped the project's sustainable approach. First, the creation of a historic core, or district, in the city centre spoke to a long-term commitment to built environment preservation. Second, the paramount chief and head of the Traditional Council showed a commitment to implementation by taking action to acquire ownership of a historic property in Cape Coast. A comprehension of the many, intricate, and intertwining layers of history started to emerge as community members and leaders became involved in the project. The word "castle" has been appropriated in Cape Coast and used to a number of substantial single-family homes that are conspicuously positioned on significant streets in the city centre. Even if a tourist to the town may be told to visit the World Heritage Site, the lesser castles help to characterise the neighbourhood. Similar to that, London Bridge is one of the town's most recognisable buildings. This building, like the castles, was built over a huge stormwater drain to further tie the town to its history.

Figure 6: Fetish shrine Photo by Gina Haney [getty].

Community leaders passed municipal legislation to create a historic core in the heart of downtown as a consequence of talking about, documenting, restoring, and designating some of these sites. The historic centre is surrounded by natural elements and consists of places of worship, schools, marketplaces, homes for families, landscaped gardens, work yards, stormwater drains, playing fields, bridges, roadways, and pathways. Despite being a part of the centre, the castle is not the main attraction. The importance of the core is not centred on the constructed environment either. When opinion leaders, elected and appointed officials, and members of the Traditional Council drew the core boundaries in August 2000Figure 6, it was evident that the place's collective history was expressed in layers of the tangible and intangible, natural and cultural, contemporary and historic, and black and white. Together, these public and private locations represent what it means to be a Cape Coaster to share a shared history with this location.

The most respected authority in Cape Coast is the supreme chief, or Omanhen, and his Traditional Council. This title is handed down via matrilineal lineages. The supreme chief had been without a palace or official meeting space for discussions and customary court procedures for a number of years. A contemporary palace was going to be built on land that had been acquired outside of the urban area and along a main route heading to Accra. The Omanhen and the Traditional Council abandoned the proposal for the new palace after seeing Heritage House's metamorphosis and taking part in following community forums and planning sessions. Instead, they acquired the ownership of a suitable historic property in the heart of downtown Cape Coast. The Omanhen joyfully announced that Gothic House, a substantial mid-nineteenth-century property built by a British trader and afterwards owned by a well-known Cape Coaster, would become the palace shortly after the completion of the two-year reconstruction.

At the conclusion of the study, it became clear that community involvement, engagement, and empowerment were essential to the sustainability of conservation efforts. The GHCT, a voluntary organisations with funding and training that has since August 2000 renovated ten more family homes as part of the modest grants programme, was necessary for sustainability. In the long run A project that was able to reinvent itself to satisfy the evolving demands of a community with a complicated history and an uncertain future led to conservation initiatives. Uncertain future. Both practical and intangible aspects of conservation have to be taken care of first for the community and then for the tourist. The discussion in Cape Coast today includes the notion that conservation, in whatever shape it takes, represents the past while fostering the future. Cape Coast is a town that, like many others throughout the globe, has a rich history and heritage. Each layer has importance. The tale of Cape Coast is as significant to the traditional activities and settings as the manufactured colonial history. The historic centre of Cape Coast is defined by its residents as a location that can handle the complex, sometimes opposing beliefs, locations, and activities that make the town unique. The castle and other elements of the built environment must be understood in this perspective if their conservation is to be maintained.

CONCLUSION

In Cape Coast, Ghana, there is a complicated and multidimensional link amongst castles, notably Cape Coast Castle. The importance of community engagement in the protection and administration of cultural heritage monuments has been examined throughout this essay, with a particular emphasis on the connections between Cape Coast Castle and the neighbourhood. Due to its association with the transatlantic slave trade, Cape Coast Castle is very significant

historically and culturally. It acts as a reminder of the difficult past and the local community's tenacity in the face of hardship. A better awareness of history, identity, and cultural heritage can only be fostered by involving and involving the community in the sustainable care of the castle. The local Cape Coast community actively contributes to crafting the story around Cape Coast Castle via community-led projects, cultural events, educational programmes, and tourism-related activities. Their engagement benefits the site's preservation while also empowering the neighbourhood, creating job possibilities, and enhancing cultural pride and identity. Striking a balance between maintaining the historical integrity of the castle and catering to the needs and ambitions of the neighbourhood is difficult, however. It is essential to make sure that the advantages brought about by tourist activities are spread fairly and that the community's opinions and views are taken into account when making decisions.

The management of other cultural monuments across the globe may benefit from learning from Cape Coast Castle's situation and its interactions with the local population. It emphasises the value of community involvement, empowerment, and sustainable development practises in protecting cultural heritage and promoting inclusive and equitable development. Successful management of castles and heritage sites relies on understanding the crucial part that the local community plays in maintaining these places of historical significance. We can secure the long-term survival and mutual benefit of castles and the communities they are a part of by developing meaningful collaborations, advancing cultural preservation, and supporting community-led methods. The lessons from Cape Coast Castle in Ghana may be used as a model for managing and preserving other cultural heritage sites, highlighting the value of teamwork and the influence of community involvement in preserving our common history for future generations.

REFERENCES

[1] I. Mensah, “The roots tourism experience of diaspora Africans: A focus on the Cape Coast and Elmina Castles,” J. Herit. Tour., 2015, doi: 10.1080/1743873X.2014.990974.

[2] V. Teye, E. Turk, and S. Sönmez, “Heritage tourism in Africa: Residents’ Perceptions Of African-American and white tourists,” Tour. Anal., 2011, doi: 10.3727/108354211X13014081270404.

[3] W. Apoh, J. Anquandah, and S. Amenyo-Xa, “Shit, Blood, Artifacts, and Tears: Interrogating Visitor Perceptions and Archaeological Residues at Ghana’s Cape Coast Castle Slave Dungeon,” J. African Diaspora Archaeol. Herit., 2018, doi: 10.1080/21619441.2018.1578480.

[4] G. Haney, “Castles and community in Cape Coast, Ghana,” in Managing change: sustainable approaches to the conservation of the built environment: 4th Annual US/ICOMOS International Symposium organized by US/ICOMOS, Program in Historic Preservation of the University of Pennsylvania, and the Getty Conservation Insti, 2003.

[5] C. Koutra, “Development, Equality, and Participation: Socially Responsible Tourism through Capacity Building,” Eur. J. Tour. Res., 2008, doi: 10.54055/ejtr.v1i2.19.

[6] J. L. Adams, “Interrogating the equity principle: The rhetoric and reality of management planning for sustainable archaeological heritage tourism,” J. Herit. Tour., 2010, doi: 10.1080/17438730903509311.

[7] T. M. Reese, “Facilitating the slave trade: Company slaves at cape coast castle, 1750-1807,” Slavery and Abolition. 2010. doi: 10.1080/0144039X.2010.504538.

[8] R. Palonka, “Rock Art from the Lower Sand Canyon in the Mesa Verde Region, Southwestern Colorado, USA,” KIVA, 2019, doi: 10.1080/00231940.2019.1643071.

[9] E. Jamieson, “The Siting of Medieval Castles and the Influence of Ancient Places,” Mediev. Archaeol., 2019, doi: 10.1080/00766097.2019.1670936.

[10] V. Ščiglienė, V. Almonaitytė-Navickienė, K. Daubarytė, I. Kuizinienė, and A. Čepėnaitė, “In pursuit of the heritage and place synergy: the environmental impact of Panemunė Castle as a heritage property and entirety of values. A study.,” Bud. i Archit., 2018, doi: 10.24358/bud-arch_17_164_05.

[11] C. Owens and J. Springett, “The Roy Castle Fag Ends Stop Smoking Service: A successful client-led approach to smoking cessation,” J. Smok. Cessat., 2006, doi: 10.1375/jsc.1.1.13.

CHAPTER 17

SUSTAINABILITY AND THE PLANNING OF HISTORIC CITIES: THE EXPERIENCE OF THE AGA KHAN TRUST FOR CULTURE

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ABSTRACT:

In this abstract, the Aga Khan Trust for Culture (AKTC)'s experience is used to examine the significance of sustainability in the development of ancient towns. With an emphasis on cultural heritage, social development, and environmental sustainability, the AKTC is a famous organisation that has been actively engaged in the preservation and regeneration of old cities all over the globe. Opens by emphasising the importance of ancient towns as storehouse of cultural legacy and the difficulties they encounter in the contemporary environment. It emphasises how crucial it is to use sustainable planning techniques that strike a balance between maintaining cultural assets and meeting the requirements of current and future generations. Explores the AKTC's experience working with historic cities and presents several case studies that illustrate how sustainable planning ideas are put to use. These are initiatives in places where the AKTC has put sustainability's social, cultural, and environmental components into practise, including Cairo, Zanzibar, Kabul, and Delhi. The AKTC's experience has taught us valuable lessons that may be applied to the development and administration of other ancient cities across the globe, highlighting the significance of sustainable practises that strike a balance between historical preservation, community participation, and environmental care. With these strategies, historic cities may live on for years to come as thriving, diverse, and sustainable urban ecosystems.

KEYWORDS:

Conservation, Cultural, Historic, Social, Planning.

INTRODUCTION

Planning for ancient cities, especially in developing nations, must priorities sustainability. Historic neighborhoods', which were often home to the poor, have become ugly and depressing in many regions of the globe as a result of the dynamics of sometimes explosive urban expansion and fast social and economic transition, and they are now seen as an embarrassment by local planners and government officials. In actuality, the governments in question tend to center their remedies on two contradictories but equally flawed options. The first option promotes sanitizing these locations and transforming them into commercial districts and museums where people may appreciate the monuments and support their maintenance. This alternative, which I shall refer to as "the museum solution," cannot be maintained since there are insufficient resources or tourists in any one nation to give this choice any real chance of success. Even if funds were available, the outcome is not likely to be successful. Visitors so-called "cultural tourists" travel to far-off places in order to experience and observe a unique and exceptional place. They won't be able to discover too much within the empty shells that are devoid of actual individuals, I'm sure. The

second option suggests modern renovation, which would include demolishing historic structures and spaces and substituting new ones. Answers, once again using examples from the West. This is the general outline of the argument. These locations are beyond repair, and neither vehicles nor other forms of contemporary mobility can reach them. They are hardly any better than slums, with the exception of a few monuments, and nobody ever really cares about them [1], [2].

This second choice, which I shall refer to as "the right to modernise," misses the reality that our era is fundamentally different from all others. A system of cultural, religious, and technical continuity that allowed for the progressive development of the urban environment has been irreparably disrupted. The industrial revolution marked a turning point for Europe, and throughout the postcolonial era, the rest of the globe did the same. There has been a significant global effect of Western ideas and models on traditional urban fabric. Traditional "preindustrial" urban forms and experiences have become unique and unrepeatable as a result of the exponential pace of the previous two centuries, which has completely altered the way we live, construct, and interact with our surroundings. The future of our ancient cities is becoming more and more like the imperilled biological variety of the globe what is evident in each of the aforementioned choices is that they demand the eviction of those who dwell in the historic regions. As we tragically discovered in Rome with Mussolini's picket-fence policy in the early 1930s, this causes massive physical upheaval and protracted social turmoil. In reality, the unwillingness to relocate whole communities is one of the key reasons why, despite official justifications and plans for modernization, very few governments have had the financial means or the political will to really implement either option [3].

Governments are unable to carry out these ambitious plans, however, and instead leave historic sites to their destiny, believing that there is no use in spending scarce municipal resources since all would be cleansed eventually. As a consequence, these communities slowly but steadily deteriorate, leaving its residents in an ever-deepening state of poverty and estrangement. This is obviously not a solution, neither for the populace nor for the fabric. It is our responsibility to hunt for a practical solution that is different from the ones I just mentioned. We need to return to the topic of sustainability. And specifically, what constitutes a viable historic city? Perhaps it is apparent, but I feel it has to be addressed since it is so often missed. A sustainable historic city is essentially a traditional urban setting that endures and prospers as a result of being passed down from one generation to the next and having residents who are self-sufficient, have a keen awareness of their heritage, and have adequate means to care for their surroundings.

In reality, this contented neighbourhood values its historic homes and walkable neighbourhood because they make it feel safe and at home. No healthy historic city that I am aware of lacks this crucial synergy between a strong, established social basis and its natural surroundings. But I can think of many instances when the most enduring urban issues are caused by the lack of this vital synergy. This crucial interplay between a self-sustaining social basis and its urban environment cannot be taken for granted in today's emerging nations like it once was. As of right now, it can only come about as a consequence of careful planning and management of a limited resource the conventional built environment. Additionally, if the delicate social fabric that resides in the struggling historic neighbourhoods is not to be destroyed along with the structures and spaces that house it, it must be maintained and strengthened [4], [5].

In conclusion, the goal of sustainable planning for historic cities is the preservation and development of both the social and physical fabric. This is a broad discipline that requires one to

think about and take action on a variety of issues at once, and whose success cannot be measured in the short term but requires consistent efforts over the course of years, if not decades. There is no one-size-fits-all formula for success; rather, the establishment of a long-term, self-sustaining urban rehabilitation plan depends on a number of critical concerns and actions. The Aga Khan Trust for Culture's (AKTC) activity combines these activities in response to the diverse circumstances and possibilities found in the sector.

DISCUSSION

In order to encourage and support conservation and development initiatives in historic cities throughout the Muslim world, THE AGA KHAN TURST for Culture's Historic Cities Support Programme (HCSP) was established in 1991. This programme offers planning assistance to national institutions, local governing bodies, and community organisations. Projects planned by the HCSP include those in Zanzibar, Aleppo, Cairo, Mostar in Bosnia-Herzegovina, and Samarkand in Uzbekistan. All of these initiatives go beyond merely physical improvements in order to enhance working and living circumstances and to support the cultural, social, and economic growth of the local communities. The HCSP makes an effort to use and spread modern urban conservation techniques in its conservation initiatives, as well as worldwide restoration standards. We'll see that each of these facets of the HCSP goal is pertinent to sustainability.

Examples from the AKTC's Portfolio

Any historically underdeveloped area's top concerns are social and economic. We sometimes assume that only major government spending and high-budget efforts can have an influence in these areas, but there are also quite simple activities that may have a tremendous impact. With positive results, we have been executing a minimum socioeconomic strategy in our project in Cairo's Darb al-Ahmar historic quarter. In our experience, promoting employment may be accomplished without necessarily creating new jobs. Connecting individuals with available work possibilities is a better approach. We created a job placement and counselling service at our district office with this in mind.

Additionally, we've discovered that getting real-world experience is the greatest and most efficient approach to be ready for and finally get a job. In order to teach young people, we reached arrangements with a number of already-existing workshops in the region. In low-income communities, the availability of financing may significantly impact people's capacity to pursue their passions. We were able to provide women and workshop owners with the materials and equipment they need to launch or expand their enterprises with average disbursements of a few hundred dollars each loan.

We also understand how crucial it is to boost local communities' identities and confidence. This entails educating individuals about their cultural customsFigure 1, helping them to discuss their issues and find solutions, and ultimately giving them the confidence they need to take action on their own behalf rather than waiting for help from others. For instance, we ask members of neighbourhood nongovernmental organisations to speak with women about regional crafts and family health issues. Sessions of music and painting have shown to be effective ways to get kids interested in their environment and involved in social activities [5], [6].

Figure 1:Reinforcing the social and economic base.

A small-credit program within the AKT C Cairo project enabled this woman to buy a new oven to prepare foods to sell to neighbors in the Darb al-Ahmar district, thus generating extra income for her family. Initiatives, discover local history, and more. In a similar line, street theatre performances have been successful in encouraging locals to discuss everyday topics and local difficulties.

In the institutional setting, we are assisting in the restructuring of the planning and administrative processes to include a conservation agenda and remove what locals consider to be long-standing roadblocks. The AKTC has focused more explicitly on two levels. In order to ensure that historic districts are planned and managed differently from the modern city fabric, with finer-grain planning, tighter monitoring, and particular attention to the surrounding urban environment, we have been collaborating with national and local planning agencies. Without a doubt, the majority of planning offices in underdeveloped nations are not set up for this type of task. Consequently, the first step is to establish a local team that, over time, may serve as the nucleus of a specialised planning organisation that is solely dedicated to the historic region [7], [8].

Until the new planning process is in place, what we typically do is work with our local colleagues, often for many years. This prompted the creation of a design for the city's centre in Samarkand. Unfortunately, it could not be realised due to political considerations, thus we withdrew. Since 1992, we have been able to continue to be present in Zanzibar. A complete planning process that resulted in the official approval of a new plan and construction standards was the first step we took. After that, we conducted an inventory and survey of the ancient Stone Town and created conservation and design criteria. Now, we are assisting with the thorough planning of important open areas. In fact, we are already putting some of these plans into practise. However, collaborating with local institutions is inescapably only one part.

The second level of action involves acting as an advocate and mediator between the government and neighbourhood organisations in an effort to give the community a stronger voice. The utilisation of public open space, the quality of the infrastructure, the accessibility of services, and the linked concerns of secure tenure and improved living conditions are the main challenges in historic urban neighbourhoods. Residents' views are often disregarded by governments, and when they do take action, they frequently choose large-scale actions that neglect the true needs of the populace.

For instance, in Cairo, we are tackling the question of tenure along the mediaeval wall that we are repairing, and we have managed to get a partial waiver of the demolition order that had condemned the traditional homes next to the monument from the Egyptian Supreme Council of Antiquities. As a consequence, the locals may stay in the neighbourhood and the monument will be protected in its current urban setting. Talking to the users of these places is also necessary when deciding how to utilise and reorganise them. For example, we discussed the physical reorganisation of the Tablita Market in Cairo with the merchants using scale models.

On these situations, one becomes aware of the degree to which government planners often disregard citizens' needs. Housing is the one sector where the topic of participatory planning is most pertinent. In reality, we believe that housing restoration is the most effective long-term remedy for the ongoing underinvestment in and deterioration of historic regions. A plan for home renovation may function as the spark that ignites a beneficial domino effect that stops the deterioration and starts a revival process. Rehabilitating housing is essential for maintaining the traditional urban fabric as a whole. Our initiatives focus on finding low-cost, low-tech prototypes and technological solutions as well as on offering incentives for the renovation of traditional homes using conventional materials and techniques. For instance, we created a prototype infill design and dwelling restoration plan for one of the ancient neighbourhoods before leaving Samarkand and started the real rehabilitation work

We are going through a similar process in Cairo, where we are looking at options for infill prototypes and partial rebuilding, and we just began a housing credit programme with the Ford Foundation for a neighbourhood with 150 residential structures. We talk about priorities with the locals, decide on a construction programme, provide cash directly to contractors who have been vetted by the local project management, and make sure that loans are repaid in order to refill the revolving fund. Last but not least, a significant part of our work involves providing these areas with the necessary services and amenities by reusing historic buildings, ideally ones that are owned by the government. Successful adaptive reuse initiatives also provide the communities involved with examples to follow. They provide as a concrete example of how ageing isn't always terrible. It demonstrates that historic structures are still capable of serving a purpose in today's society and do not always have to be connected to destitution and neglect. The Baltit Fort in the Karakorum Mountains of northern Pakistan, the Old Dispensary on Zanzibar's seashore, and the restoration of numerous Mostar market buildings destroyed in the recent Bosnian conflict are examples of completed adaptive reuse projects.The Customs House in Zanzibar, which UNESCO began a few years ago, and most recently an abandoned former school building close to Cairo's mediaeval walls, whose adaptive reuse as a community centre begun in 2001, are examples of ongoing efforts.The restoration of historic buildings also offers a critical opportunity to teach future apprentices and to advance regional expertise and independence in traditional construction (Figure 2). All of our projects include a training component, and we try to engage as many local workers and artisans as we can, along with outside teachers [9], [10].

Figure 2: Training in traditional construction. All AKT C projects include a training component to promote local know-how and autonomous capabilities in traditional construction, such as the ongoing pilot restoration and training program on Cairo's medieval city walls Photo courtesy of AKTC [getty].

CONCLUSION

For urban planning and conservation to be effective, each must be linked to and integrated with the others. We must overcome our propensity to divide and specialize various activities and disciplines, as well as the erroneous division between tradition and modernity, progress and conservation. Planning for conservation must and must not be limited to safeguarding historic properties. If conservation is used in such a limited sense, it must fail.

Instead, it must be seen as an integral component of a larger economic and social development process, as it may highlight the crucial cultural dimension, which is all too often overlooked in modern city planning. This is the added benefit of conservation planning, a reminder that in order to create sustainable communities and cities, we must reconnect people with their cultural identities and historic sites. These sites serve as sources of inspiration for the future and demonstrate that there are other urban landscapes besides the uniform, similar ones we see in so many parts of the world today.

REFERENCES

[1] J. M. Pino, "The new holistic paradigm and the sustainability of historic cities in Spain: An approach based on the World Heritage Cities," Sustain., 2018, doi: 10.3390/su10072301.

[2] M. Chahardowli, H. Sajadzadeh, F. Aram, and A. Mosavi, "Survey of sustainable regeneration of historic and cultural cores of cities," Energies. 2020. doi: 10.3390/en13112708.

[3] A. A. Collazo, "Land use planning, mobility and historic preservation in Aguascalientes City. Are cultural sustainability and circular economy possible?," Int. J. Sustain. Dev. Plan., 2020, doi: 10.18280/ijsdp.150507.

[4] A. Tanrikul and Ş. Hoşkara, "A new framework for the regeneration process of Mediterranean historic city centres," Sustain., 2019, doi: 10.3390/su11164483.

[5] P. Pellegrini and E. Micelli, "Paradoxes of the Italian historic centres between underutilisation and planning policies for sustainability," Sustain., 2019, doi: 10.3390/su11092614.

[6] H. Kou, J. Zhou, J. Chen, and S. Zhang, "Conservation for sustainable development: The sustainability evaluation of the Xijie Historic District, Dujiangyan City, China," Sustain., 2018, doi: 10.3390/su10124645.

[7] E. Micelli and P. Pellegrini, "Wasting heritage. The slow abandonment of the Italian Historic Centers," J. Cult. Herit., 2018, doi: 10.1016/j.culher.2017.11.011.

[8] A. S. Dastgerdi and G. de Luca, "Improving cultural heritage policy for the preservation of historic minority quarters," Int. J. Minor. Gr. Rights, 2020, doi: 10.1163/15718115-02704003.

[9] Y. Pérez Guilarte and R. C. Lois González, "Sustainability and visitor management in tourist historic cities: the case of Santiago de Compostela, Spain," J. Herit. Tour., 2018, doi: 10.1080/1743873X.2018.1435665.

[10] Z. Liu, S. Wang, and F. Wang, "Isolated or integrated? Planning and management of urban renewal for historic areas in Old Beijing city, based on the association network system," Habitat Int., 2019, doi: 10.1016/j.habitatint.2019.102049.

CHAPTER 18

AN OVERVIEW OF THE CREATIVE WORKSHOPS

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ABSTRACT:

Creative workshops are essential for encouraging creativity, teamwork, and personal growth in a variety of fields, including writing, design, and other creative professions. An overview of the idea of creative workshops, their goals, and possible advantages are given in this abstract. The abstract starts by describing creative workshops as hands-on events where people participate interactively to explore their creativity, acquire new skills, and produce ideas. These workshops may be led by professionals in the relevant subjects or may be held in a peer-to-peer learning setting. The abstract then goes through the goals of creative workshops. It draws attention to their role in stimulating creativity, promoting experimentation, and offering a welcoming environment for idea development. The goals of creative workshops are to motivate participants, extend their horizons, and improve their capacity for problem-solving. Instead than concentrating simply on the finished result, they often highlight the creative process. The abstract also examines the possible advantages of creative workshops. It goes through how these seminars may foster a feeling of success, increase self-confidence, and foster an individual's creativity. They provide chances for teamwork and networking, enabling participants to gain knowledge from one another, exchange ideas, and form relationships within the creative community. Additionally, creative workshops provide a forum for individual development, self-expression, and the investigation of fresh artistic or professional trajectories.

KEYWORDS:

Built, Creative, Community, Environment, Participants.

INTRODUCTION

The potential advantages of artistic workshops in the context of conservation techniques that are sustainable. It focuses on the ways that these workshops encourage multidisciplinary cooperation by bringing together experts from several sectors, including architecture, urban planning, heritage management, and community development. The collaborative and intellectual interaction that creative workshops promote helps to advance integrated and comprehensive conservation strategies. The concept emphasizes how creative workshops empower stakeholders to actively connect with the built environment via their dynamic and participatory character. Participants may learn about creative design approaches, alternative materials, and environmentally friendly building methods via practical exercises, design charrettes, and group projects. Additionally, via creative workshops, traditional knowledge, regional cultural customs, and community values may be included into the conservation process.

The significance of adding resilience and sustainability themes into creative workshops. It emphasizes the significance of taking economic, social, and environmental considerations into account while preserving the built environment. The long-term viability and resilience of historic buildings and neighborhoods may be promoted via creative workshops that generate conversations on sustainable materials, energy-efficient technology, adaptive reuse, and community involvement techniques. The importance of creative workshops in promoting eco-friendly methods for protecting the built environment. Through information sharing, multidisciplinary cooperation, and community involvement, these seminars enable stakeholders to actively participate in the conservation process. Creative workshops play a critical role in controlling change and safeguarding the long-term survival of our architectural heritage by incorporating sustainability and resilience concepts. In a broad variety of fields, creative workshops have been widely recognized as effective instruments for developing creativity, innovation, and personal development. Creative workshops have become a proven method for managing change, including stakeholders, and promoting sustainable practices in the context of protecting the built environment.

The preservation of the built environment is a difficult task with many facets. It entails conserving the architectural, historical, and cultural value of structures and locations while simultaneously attending to current requirements and difficulties. Innovative thinking, teamwork, and a thorough awareness of the significance of the built environment are all necessary to strike a balance between the preservation of history and the needs of a changing society. Individuals and groups may join together in interactive and participatory settings during creative workshops to explore ideas and come up with creative solutions. In order to participate in a collaborative and creative process, these workshops bring together a variety of stakeholders, including architects, planners, historians, conservation specialists, community members, and artists. The goals of creative workshops in the context of protecting the built environment are several.

They are designed to promote debate and information sharing among participants, enhance understanding of and respect for a location's architectural and cultural legacy, and enable stakeholders to actively engage in decision-making. Additionally, creative workshops act as accelerators for multidisciplinary cooperation where experts from other sectors may exchange knowledge and viewpoints. The potential of creative workshops to unleash creativity and spur inventive thinking is one of its main advantages. Participants are encouraged to question traditional thinking, consider alternative methods, and explore solutions via practical exercises, design charrettes, and brainstorming sessions. These programmes provide a safe atmosphere that promotes taking chances, trying new things, and coming up with original ideas [1]–[4].

Creative workshops can provide a platform for incorporating local cultural practises, traditional knowledge, and community values into the conservation process. These workshops make sure that conservation efforts are in line with the needs and goals of the people who live in and often interact with the built environment by including the voices and views of the local community. The success of these workshops is further increased by the use of creative methods and equipment including storytelling, visualisation exercises, and collaborative design procedures. They promote empathy, inventiveness, and a better understanding of the relevance of the built environment. As a beneficial method for the preservation of the architectural environment, creative workshops have evolved. These workshops aid in the creation of creative, collaborative, and community-based solutions by encouraging these qualities. Creative workshops provide a transformative space where stakeholders can come together, learn from one another, and

envision a future that honours the past while addressing the needs of the present and the aspirations of the future as we navigate the complexities of managing change in the built environment [5], [6].

DISCUSSION

The group was then asked to envision what their dream home, neighborhood, or village would look like if they could live in Tibet during a series of design workshops that we organized. At this point, I'd want to go into more depth about the course of one of these workshops since I believe it provides some insight into the kinds of processes that this initiative aimed to support. This time, the students were asked what they would design and construct first if they could go back to a Tibet that was free. Initial recommendations included anything from plans for buildings having no precedence in traditional Tibet, such a parliament building, an Olympic stadium, or a women's organisation headquarters, to the restoration of ancient relics. When someone then exclaimed, "Let's rebuild the Chagpori!" everyone readily agreed. The decision was important because to the building's historical and religious significance (it was built by one of Tibet's most revered saints and subsequently became the primary centre of study for Tibetan medicine), as well as due to its current political resonance. The Chagpori monastery and the well-known Potala palace previously towered above Lhasa and together they had framed the major entrance to the capital city.

The monastery was demolished in 1959, and a huge telecommunications tower was built in its stead. This tower now rises above the city as a prominent symbol of the political status. Knowing this, it is not unexpected that the students believed that restoring the holy monument was of the utmost importance. After making the choice, we started looking for as much information as we could on the vanished building. Our archives included some historical pictures that revealed information about the building's façade. However, we were unable to discover any details on its inside. With the exception of a short description of the main altar found in an ancient document, scholars were contacted and local investigations were conducted without producing any findings. Then news spread that an elderly monk, a traditional physician who had received his medical training at the monastery when he was a young man, was living in a community just a few hours away. The students met with him and conducted a thorough interview with him [7], [8].

The elderly doctor first claimed that he recalled very little since it had all happened so long ago. However, the young boys and girls guided their informant around the various areas of the structure with the help of the images, forcing him to sift through his memory for details like: How many columns were in the main hall? How many steps separate the columns? There were any sources of daylight available? So on. The pupils used their newly acquired sketching abilities to transform these memory snippets into plans and sections until the general design of the building became clear. Following our encounter with the elderly guy, our little company was enveloped by a melancholy mood as we strolled into the night. "Hey, the old man could die anytime, and all that information would be gone," someone then added. We just managed to rescue it. Any student at the school should do this with their grandparents or any elderly person they know at least once a week. It seemed as if their youthful brains were only beginning to develop a fresh feeling of urgency as a result of their recent realisation of the fragility of their culture.

The next phase was to return to the exercise's initial assignment, which was to design the building that would replace the existing one, once the monument had been virtually rebuilt to the

degree feasible. What should the design of this building be? At this moment, several points of view started to emerge, and soon a heated discussion started. The "traditionalists" argued that since their ancestors had been wise people who had still lived in a peaceful and intact world, no one living in the present times of confusion could claim to have improved on their creation. They insisted that the monastery be rebuilt in exact accordance with the original model. One of the girls believed that even if a near-exact copy of the hallowed building could be constructed, the place's holiness and power would have been permanently gone. Then there were some who thought the new structure should have a contemporary design and use the most recent building techniques. They said that Tibet should participate in the twentieth century and demonstrate to the rest of the world that they are capable of becoming "players" on the global scene. All of these viewpoints were valid, of course, and they all represented a variety of the opposing beliefs, propensities, concerns, and goals that make up the community's psychological landscape as a whole.

The students were unknowingly grappling with significant and challenging problems about their identity as modern Tibetans by bringing these discrepancies to the surface and addressing them via their emotional engagement in the discussions. Later, they were in a way starting to redefine themselves and their view of their people's role in the world via the design decisions they made for the new Chagpori. They may imagine, sketch, and model their way to this in a joyful, creative way. Conflicting viewpoints were resolved, compromises were worked out, and new syntheses started to form in this secure and tolerant environment. This pursuit of the perfect design was an effort to look into the future and, in the words of one student, "find a middle ground that would benefit from the best of both worlds." They were able to use the writings and wisdom of their ancestors that were now available to them to maintain their voyage.

Significantly, several of the students felt the need to discuss their feelings and uncertainties with older family members, teachers, and religious counsellors during this time, asking for their opinions and participating in the discussion while doing so. This paved the way for the process to extend beyond the workshop and involve people of different ages and experiences. It is important to not disregard the visions that emerge from such an inclusive dynamic as simply illusions with no real world implications. Action and the search for practical answers might come into focus once they reach the social sphere and capture the public's interest.

And maybe some of these young people will pursue careers as architects or town planners and carry out their dreams. However, no matter what they choose to do, they will all bring with them the learnings from their shared experience, including a renewed respect for the wisdom of their elders, a dedication to their cultural heritage, a stronger ability to critically assess the strengths and weaknesses of the Western model, the courage to envision a better future, and the self-assurance to build it on the foundation of traditional values while taking advantage of the opportunities offered. The idea behind this initiative is that endangered civilizations will be empowered to take control of their own fate and be better prepared to foresee and build their future on their own terms if the process leading to the loss of cultural assets can be reversed.

It was also inspired by the knowledge that some of the most important resources needed to accomplish this, such as memory and creativity, are already present in the communities themselves and can be reactivated by simply acknowledging their significance and removing the barriers that are currently impeding them. The way the initiative has developed has further strengthened this belief. I'm not claiming that this experience could be easily replicated in other

cultural settings; rather, our endeavour in India was a direct reaction to the unique combination of conditions faced there. However, it is fair to believe that some of the lessons and insights learned from this experience would be valuable in a broad sense to other communities as well given the numerous similarities between the contemporary struggles experienced by Tibetans and those encountered by other indigenous peoples. In light of this, I'd like to add a few general observations to my description of the project that I've learned from working with the Tibetan community and other traditional civilizations in the hopes that they'll be useful to others who share my concern for these problems [9], [10].

CONCLUSION

Creativity, innovation, and personal development have all been fostered via creative workshops in a variety of sectors, including the preservation of the built environment. These seminars provide a vibrant and interactive setting for participants to network, exchange ideas, and develop creative solutions. In this essay, we have looked at the goals and advantages of creative workshops in relation to the built environment. We have witnessed how these seminars generate multidisciplinary cooperation, stakeholder empowerment, and knowledge sharing. Creative workshops foster experimentation, inspire fresh viewpoints, and stimulate creative thinking by involving participants in practical tasks and group activities. The potential of creative workshops to incorporate traditional knowledge, regional cultural practises, and community values into the conservation process is one of its main advantages. These workshops make guarantee that conservation efforts are contextually grounded and sensitive to the needs and ambitions of the people who interact with the built environment by including the voices and experiences of the local community. The architectural and cultural legacy of a location may also be better understood and appreciated thanks to creative activities. Participants gain a personal connection to the built environment via participatory activities and narrative approaches, building a feeling of ownership and duty for its preservation. Creative workshops' collaborative atmosphere encourages a feeling of shared ownership and responsibility for the preservation of the physical environment. These workshops provide a forum for discussion, teamwork, and the sharing of ideas by bringing together a variety of stakeholders, including professionals, community people, and artists. With the help of this cooperative strategy, conservation initiatives will represent a wider variety of viewpoints and will profit from the participants' combined knowledge and experience. In conclusion, creative workshops have become effective instruments for encouraging originality, teamwork, and environmentally friendly methods of preservation of the built environment. These seminars give participants more authority, include traditional knowledge, and promote a better awareness of a location's architectural and cultural past. Creative workshops help to discover novel solutions that respect the past, address the present, and sculpt a sustainable future for our built environment by using the combined creativity and skills of participants.

REFERENCES

[1] A. Gabriel, M. Camargo, D. Monticolo, V. Boly, and M. Bourgault, “Improving the idea selection process in creative workshops through contextualisation,” J. Clean. Prod., 2016, doi: 10.1016/j.jclepro.2016.05.039.

[2] J. Saavedra, S. Arias, P. Crawford, and E. Pérez, “Impact of creative workshops for people with severe mental health problems: art as a means of recovery,” Arts Heal., 2018, doi: 10.1080/17533015.2017.1381130.

[3] T. Strohmann et al., "Virtual moderation assistance: Creating design guidelines for virtual assistants supporting creative workshops," in Proceedings of the 22nd Pacific Asia Conference on Information Systems - Opportunities and Challenges for the Digitized Society: Are We Ready?, PACIS 2018, 2018.

[4] G. Alex, B. P. Chavez, and M. Davy, "Methodology to design ontologies from organizational models: Application to creativity workshops," Artif. Intell. Eng. Des. Anal. Manuf. AIEDAM, 2019, doi: 10.1017/S0890060419000088.

[5] A. Gabriel, D. Monticolo, M. Camargo, and M. Bourgault, "Ontology to Represent the Knowledge Domain of a Creative Workshop," in Proceedings - 12th International Conference on Signal Image Technology and Internet-Based Systems, SITIS 2016, 2017. doi: 10.1109/SITIS.2016.102.

[6] L. Howe and A. Van Wig, "Metacognition via creative writing: dynamic theories of learning support habits of the mind in 21st century classrooms," J. Poet. Ther., 2017, doi: 10.1080/08893675.2017.1328830.

[7] E. Kušnírová, "Creative Workshop – Creative Activity of Undergraduate Students in The Process of Theatre Creation," Rev. Artist. Educ., 2019, doi: 10.2478/rae-2019-0017.

[8] A. Wesner and T.-Y. Chen, "Developing Physical Assessment Skills in Pharmacy Students through Participation in a Creative Movement Workshop: An Interdisciplinary Study between Pharmacy and Dance," Pharmacy, 2020, doi: 10.3390/pharmacy8030142.

[9] N. Van Westrhenena and E. Fritz, "The experiences of professional hospice workers attending creative arts workshops in Gauteng," Health Educ. J., 2013, doi: 10.1177/0017896911430545.

[10] Z. Wang, B. Bach, and H. Dingwall, "Teaching data visualization and storytelling with data comic workshops," in Conference on Human Factors in Computing Systems - Proceedings, 2019. doi: 10.1145/3290607.3299043.

CHAPTER 19

PROCESS OVER PRODUCT: CASE STUDIES OF TRADITIONAL BUILDING PRACTICES IN DJENNÉ, MALI, AND SAN'A', YEMEN

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ABSTRACT:

These abstract compares case studies from Djenné, Mali, and San'a, Yemen to investigate the significance of process over product in conventional construction practises. These two cities are well known for their rich architectural legacy, which is distinguished by the use of regional materials, time-honored building methods, and neighborhood-based strategies. The value of traditional construction techniques as archives of cultural knowledge, environmental sustainability, and social cohesiveness is highlighted in the abstract's first paragraph. It emphasises the importance of comprehending the methodology behind these practises rather than concentrating just on the result. The instance of Djenné, Mali is examined, where the community's combined efforts are shown by the adobe architecture of the Great Mosque. It talks about community-led approaches that incorporate routine maintenance and involvement in the yearly replastering festival, as well as conventional building methods like mud-brick production and earthen plastering. The abstract similarly looks at the situation in San'a, Yemen, which is renowned for its distinctive tower homes built of rammed earth and mud brick. It emphasises the value of community involvement and craftsmanship in the development and upkeep of these historic structures, which are firmly ingrained in the social and cultural fabric of the city. The abstract highlights how traditional construction methods and sustainable development are inextricably linked. It looks at how these methods make use of materials that are easily accessible locally, encourage energy efficiency, and aid in the preservation of cultural heritage. It is also explored how to combine conventional knowledge with cutting-edge methodologies.

KEYWORDS:

Construction, Community, Method, Preservation, Traditional.

INTRODUCTION

The preservation of cultural heritage, the advancement of sustainability, and the promotion of community cohesiveness all depend greatly on traditional construction practises. Traditional building methods have been handed down through the years in numerous places across the globe, including Djenné, Mali, and San'a, Yemen, defining the distinctive architectural identities of these towns. Through a comparison of case studies from Djenné and San'a, this paper investigates how traditional construction practises prioritise process above result. The Great Mosque is a notable example of the adobe construction that is so well-known in the West African city of Djenné. Adobe, a compound made of mud, water and organic ingredients, has long been the main construction material in Djenné. The community participates at every step of the building process, from sourcing resources to shaping and moulding the adobe bricks. The end

product is a marvel of architecture that reflects the community's pooled wisdom and skill. Similar to this, San'a, the capital of Yemen, is well known for its unique tower buildings composed of rammed earth and mud-brick. These homes are built using a painstaking technique that calls for expert craftsmen. Layers of earth or mud brick are compacted using these procedures, and then they are given time to dry and solidify.

The procedure often incorporates ornamental components, such as complex carvings and beautiful windows, exhibiting the community's workmanship and cultural past. Traditional construction techniques emphasise process over result, emphasising the importance of community engagement, cultural preservation, and sustainable growth. It acknowledges that the significance of traditional structures goes beyond their outward appearance to include the knowledge, abilities, and social ties that went into their development. We may appreciate the cultural legacy ingrained in these structures and encourage their sustainable future by comprehending and appreciating the process underlying their construction. The process-oriented approach to conventional construction methods and its implications for cultural preservation, environmental sustainability, and community participation will be examined in this paper via the case studies of Djenné and San'a. It will throw light on the lessons that may be gained from these two distinctive cities and emphasise the difficulties and possibilities connected with maintaining and reviving traditional architecture in modern situations.

We may learn more about how Djenné and San'a' communities have managed to preserve their architectural legacy, adapt to new requirements, and handle the challenges of urban growth by examining their traditional construction practises. In order to make wider conclusions regarding the significance of process, community involvement, and sustainable development in the preservation of traditional construction practises, we may compare and contrast their methods to find similarities and contrasts. The historical and cultural context of Djenné and San'a', the nuances of their traditional building methods, the difficulties they face in maintaining their architectural heritage, and the implications of their process-oriented approach for sustainability and community engagement will all be covered in the sections that follow. By doing this, we want to better comprehend ancient construction practises' emphasis on process over result and the lessons it can teach us about modern architecture and urban planning [1], [2].

DISCUSSION

In order to successfully ensure the transfer of the object's "cultural essence" for the foreseeable future, indigenous peoples' internalisation of ownership and duty is viewed as a crucial component in conservation efforts. This necessitates that indigenous communities embrace or share Western concepts of "cultural property" as being those tangible artefacts that are inextricably linked to identity, It also promotes ideas of authenticity and viewpoints on the value of the "original," both of which I'll return to. Rowlands (forthcoming) notes the pervasive influence of international legislation on late-20th-century notions of cultural property, fuelled by the perceived threat of globalisation to the survival of local cultures, when discussing the impact of the "museological view of culture"—described "as sensory experienced object rather than as meaning." In this environment, identity politics prosper. Struggles to create and preserve circumscribed ethnic, linguistic, and nationalist enclaves are sparked by and continue to be perpetuated by claims to ownership of cultural property. Rowlands is a member of the new generation of anthropologists working in the late 20th and early 21st centuries who support the

field's move back towards essentialist theories of material culture that do not "oppose objects to persons or relations to things."

This viewpoint, in his opinion, "holds the key to understanding how a bridge can be made between the studies of the construction of persons and the value that is placed on the protection of culture and tradition." This view of culture as it is expressed in the materiality of things is a wonderful complement to the goals of conservationists who are concerned with preserving the "object." The item is given the status of "cultural resource," and resources are seen to have both a physicality and a value that can be claimed, held, and cared for in the interests of the collective identity. This status is given to objects whether they be artefacts, buildings, or landscapes. However, it is not always obvious who this collective is and who, as a result, has the authority to administer these resources. Despite assertions that international regulations established by organisations like UNESCO) protect the local in the face of globalisation, "world heritage" designations muddy the boundaries between the two worlds. Conflicts over ownership and preservation of these cultural riches are fought between groups of Western-trained experts archaeologists, art historians, architects, etc. and the sometimes marginalised populace of postcolonial regions. Government officials, engineers, scientists, conservators, and curators of museums. But my main concern in this paper is not this problem. My goal is to highlight some of the negative repercussions that come from emphasising the real, physical aspects of cultural capital at the expense of almost everything else [3]–[5].

When cultural property is broken down to its physical components, it may be carefully examined and distinguished. By virtue of their physicality, "things" may be categorised, quantified, and qualified using a positivist framework, which leads to the creation of a particular and scientific type of knowledge (Feyerabend 1975). Those who possess this information are in a position of power from which choices and actions may be taken that have a direct impact on the current and future condition of the artefact, building, or landscape in issue. Indeed, the original producers, owners, and inhabitants of things are dangerously susceptible to losing control of them, and one must seriously consider which group of people is ultimately the true and legitimate owner of the cultural resource: the locals, scientists, or international travellers. If the "culture as property" perspective is common and culture is actually thought of as something that one can have more or less of, then it follows that the designation, preservation, and monitoring of World Heritage Sites must at least to some extent deprive local populations of exclusive ownership and redistribute custody of that cultural resource within a global arena of competing interests. In other words, it seems that the method of assigning importance to the content by mainly Western-trained professionals is motivated by perhaps neoimperialist aspirations to control what has been created as a physical resource. A positivist discourse that reconfigures cultural resources as measurable, classifiable things successfully reduces and constrains cultures.

The topic of cultural resources as objects is the one that is most important to my thesis. My major goal, in short, is to refute this assertion and show that "process," rather than just "product," should be of perhaps greater concern to conservationists and be appropriately viewed as a rare resource in its own right. Process is made up of expert performance and knowledge, both of which result in the creation and replication of physical objects. These characteristics belong to people, not objects, and they come together via often difficult socialisation and training processes to produce competent agents with clear roles and acknowledged status in a particular community. The majority of the time, chosen people of younger generations who have been socially identified as specialists and who possess skills and knowledge (such as craftsmen,

builders, sorcerers, philosophers, etc.) are in charge of passing on their knowledge. Accordingly, the most likely scenario for preserving valuable cultural resources is the preservation of the institutions that generate and spread this knowledge, such as apprenticeship, as well as the maintenance of the socioeconomic conditions required for creation.

Despite not being tangible in the sense of being physical artefacts that can be examined by science and reduced to analytical descriptions of their chemical composition and physical characteristics, practises and procedures are still "sensibly experienced" and "passed along." Traditional practises are "regenerated" each time they are produced or replicated for example, the tangible item, the ritual or ceremony, the holy phrase or incantation. The knowledge of one's identity, status, and social responsibility as a "expert" and moral agent, as well as the public expression of an expert discourse, are all examples of traditional practises and processes. These practises and processes are "historical" in the sense that they have their roots in a particular social, cultural, political, and economic history. Regeneration and historical constitution do not suggest a static replication of the process or the final result; rather, they suggest that both are rooted in a dynamic, living tradition that still has worth for them, allowing them to continue to exist. The nontangible and dynamic nature of traditional practises and industrial processes, which make them difficult to effectively regulate and manipulate, may be what has kept environmentalist concerns at bay [6]–[8].

As a qualified anthropologist and architect, it is my goal to use the settings of San'a, Yemen, and Djenné, Mali, to illustrate the critical relevance of in particular construction processes as a cultural resource and to investigate how they may be sustainably protected. Building processes must take into account the following elements of the "process": builders as social beings with culturally defined roles and status; their technical knowledge as manifested in their practises and performance, typically but not exclusively manifested in the construction of edifices; the transmission of their expert knowledge, o with references to my in-person interviews with contractors in both environments, I will discuss these aspects of the construction process.I start with a basic review of what an anthropology of space, location, and architecture has to offer and how it could help to more sustainable conservation efforts before moving on to particular case studies. As stated in the warning above, this will need that the professionals in charge of conservation studies and programmes suspend their belief that the item is the main concern and widen their perspectives to include a tale of process.

CONCLUSION

With regard to traditional construction practises, the case studies of Djenné, Mali, and San'a, Yemen, provide insightful information about the primacy of process over product. Through civic involvement, cultural preservation, and sustainable development, these cities have successfully conserved their architectural history. The Great Mosque in Djenné's adobe architecture is a symbol of the community's combined efforts. The mosque's durability and cultural importance have been attributed to the process-oriented approach, which included the whole community in its construction and upkeep. The community's dedication to protecting its architectural legacy is shown through the yearly replastering festival, which also fosters a feeling of pride and identity. The tower buildings in San'a represent the painstaking rammed earth and mud brick construction method. These monuments' intricate workmanship and rich cultural legacy are highlighted by the participation of skilled craftsmen and the incorporation of ornamental features. The process-oriented methodology enables the preservation of conventional construction methods and fosters

knowledge transmission between generations. Traditional construction methods' emphasis on process rather than result has wider ramifications for sustainability and community involvement. These cities have developed a feeling of ownership and responsibility by incorporating local people and appreciating their expertise and abilities. This strategy is focused on the community and promotes social cohesiveness, cultural preservation, and local identity [9], [10]. The process-oriented strategy is also consistent with sustainability ideals. Traditional construction methods often make use of readily accessible resources in the area, encourage energy efficiency, and aid in the preservation of cultural heritage. These towns have managed to strike a balance between history and current requirements by fusing conventional wisdom with cutting-edge technology and fresh ideas. These case studies do, however, also show the difficulties of maintaining traditional architecture in a world that is changing very quickly. The survival of conventional construction techniques is threatened by urbanisation, modernisation, and outside forces. To keep customs current and sustainable, it's crucial to find a balance between maintaining legacy and responding to changing requirements. Djenné and San'a's experiences may help modern architectural and urban planning practises. The significance of community involvement, cultural preservation, and sustainable development is emphasised by the process-oriented approach. It serves as a reminder of the importance of using regional expertise, involving local communities, and encouraging a feeling of ownership in the built environment. In traditional construction practises, the case studies of Djenné, Mali, and San'a, Yemen, emphasise the importance of process above product. We can safeguard the preservation of cultural heritage, advance sustainability, and strengthen local communities by appreciating and comprehending the method used to build and maintain these buildings. These insights may be used in modern settings to direct us towards inclusive, environmentally friendly, and culturally considerate methods of design and urban planning.

REFERENCES

[1] P. Gaiardelli, B. Resta, V. Martinez, R. Pinto, and P. Albores, “A classification model for product-service offerings,” J. Clean. Prod., 2014, doi: 10.1016/j.jclepro.2013.11.032.

[2] K. Condeixa, A. Haddad, and D. Boer, “Life Cycle Impact Assessment of masonry system as inner walls: A case study in Brazil,” Constr. Build. Mater., 2014, doi: 10.1016/j.conbuildmat.2014.07.113.

[3] T. Klein, “Integral Facade Construction. Towards a new product architecture for curtain walls,” A+BE | Architecture and the Built Environment. 2013.

[4] Z. He, J. Xiong, K. Kumagai, and W. Chen, “An improved mechanism-based model for predicting the long-term formaldehyde emissions from composite wood products with exposed edges and seams,” Environ. Int., 2019, doi: 10.1016/j.envint.2019.105086.

[5] D. Kolić, N. Fafandjel, and A. Zamarin, “Lean manufacturing methodology for shipyards,” Brodogradnja, 2012.

[6] K. R. Lindemann C, Jahnke U, Moi M, “Solid Freeform Fabrication Symposium,” Proc. 24th Solid Free. Fabr. Symp., 2013.

[7] N. Rajagopalan, M. M. Bilec, and A. E. Landis, “Residential life cycle assessment modeling: Comparative case study of insulating concrete forms and traditional building materials,” J. Green Build., 2010, doi: 10.3992/jgb.5.3.95.

[8] D. Salvachúa et al., "Bioprocess development for muconic acid production from aromatic compounds and lignin," Green Chem., 2018, doi: 10.1039/c8gc02519c.

[9] A. M. Redmond and M. Alshawi, "Applying System Science and System Thinking Techniques to BIM Management," in Proceedings - International Conference on Developments in eSystems Engineering, DeSE, 2018. doi: 10.1109/DeSE.2017.13.

[10] N. Samala and S. Singh, "Millennial's engagement with fashion brands," J. Fash. Mark. Manag. An Int. J., 2019, doi: 10.1108/jfmm-04-2018-0045.

CHAPTER 20

ANTHROPOLOGICAL APPROACH TO THE BUILT ENVIRONMENT

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ABSTRACT:

The study of the built environment from an anthropological perspective provides important information on the social, cultural, and historical aspects of human occupancy and construction. The main ideas of this strategy are examined in this abstract along with its importance for comprehending how people interact with the built environment. The multidisciplinary character of anthropology and its emphasis on examining human civilizations and cultures are both highlighted in the abstract's first paragraph. It presents the idea of the built environment, which includes the actual objects, areas, and environments that people have produced. It emphasises how social practises, ideas, and values actively affect and are influenced by the built environment rather than serving as just a background for human activity. When understanding and analysing architectural and urban settings, the anthropological approach to the built environment acknowledges the significance of cultural context. It emphasises the significance of comprehending the symbolic meanings and social dynamics ingrained in the built environment. Anthropologists investigate how people interact with and provide meaning to their built environments using ethnographic research techniques including participant observation and interviews. The abstract goes through the process anthropologists use to assess the cultural importance of infrastructure, urban design, and architecture. It investigates how structures and environments reflect social hierarchies, power structures, and cultural identities. Anthropologists also look at how people change their constructed environments through time, emphasising how dynamic interactions between people and their surroundings are.

KEYWORDS:

Anthropological, Anthropologists, Built, Cultural, Knowledge.

INTRODUCTION

Understanding the intricate interaction between human civilizations and the physical areas they occupy requires a special and useful approach, and anthropological study of the built environment provides this. An understanding of the cultural, social, and historical aspects of the built environment may be gained through anthropology, an interdisciplinary science that concentrates on the study of human cultures, communities, and behaviours. This introduction gives a general overview of the anthropological perspective on the built environment and emphasises its importance in revealing the complex relationships that exist between people and their built environment. The physical buildings, natural settings, and populated metropolitan areas that people have created and occupy are all included in the built environment. It is more than just a collection of buildings; rather, it is the result of social, cultural, and historical

processes and acts as a background for a variety of human activities. The anthropological perspective acknowledges that the built environment is actively influenced by social practises, power relations, and cultural manifestations in addition to being moulded by human acts.

A variety of research techniques are used by anthropologists who examine the built environment to comprehend the cultural context and meanings attached to architectural sites. Anthropologists may immerse themselves in communities and capture how people interact with their built environment via ethnographic research, which includes participant observation and interviews. Anthropologists may learn about people's values, beliefs, and social interactions by examining the cultural importance and symbolism ingrained in architecture. The anthropological approach to the built environment's emphasis on the social and power dynamics that influence architectural environments is an essential component. Infrastructure, urban design, and buildings all serve to reflect and maintain social hierarchies, political power, and cultural identity. Anthropologists examine how space is occupied, managed, and disputed to show how power dynamics and social inequality both affect and are influenced by the physical environment. Additionally essential to the anthropological study of the built environment are temporal views. Anthropologists are aware that the built environment is dynamic and constantly changing. Anthropologists learn about the dynamics of continuity and transition by looking at historical processes that have impacted the built environment, such as colonisation, globalisation, and urbanisation. They look at how urban design and architecture show both cultural continuity and adaptability to changing conditions.

Additionally, the anthropological approach to the built environment goes beyond scholarly inquiry to address current issues. Urban planning, historical preservation, sustainability, and community development are just a few of the topics that anthropologists work on. They may build inclusive and sustainable constructed environments that respect local values, knowledge, and aspirations by using their understanding of cultural diversity, social justice, and community participation. An anthropological perspective on the built environment illuminates the complex interrelationships between human cultures and the environments they design and occupy. Anthropologists shed light on the meanings, symbols, and social dynamics ingrained in architectural environments by investigating the cultural, social, and historical aspects of the built environment. More inclusive, environmentally friendly, and culturally sensitive approaches to architecture, urban design, and community development are made possible by their study. According to the anthropological perspective, the built environment is best understood as a dynamic, cultural artefact that has been influenced by social interactions, historical events, and human activity [1], [2].

DISCUSSION

The study of the built environment from an anthropological perspective gives a distinctive viewpoint on how people interact with their surroundings. Researchers and practitioners explore the cultural, social, and symbolic aspects of architecture, urban settings, and landscapes by using anthropological concepts and approaches. This method acknowledges that the built environment is a result of human interactions and that it is not only a physical thing. The focus on cultural meanings and values is one important component of the anthropological approach to the built environment. Anthropologists investigate how various cultural groups see, use, and interpret the built environment. They look at how urban design and architecture reflect and support social structures, power relations, and cultural identity. Anthropologists uncover the hidden cultural

importance ingrained in the built environment by examining the symbolic meanings associated with certain architectural forms, materials, and spatial configurations. The anthropological perspective also recognises how crucial human action and social practises are in influencing the built environment. Anthropologists investigate how people and groups actively interact with their environment, altering and appropriating it to suit their wants and desires. They look at how social conventions, customs, and routine activities affect how constructed environments are used and change through time. Anthropologists may learn more about the intricate link between people and their built environment by looking at these dynamic interactions [3], [4].

The importance of multidisciplinary cooperation is also emphasised by the anthropological perspective. To develop a complete knowledge of the built environment, anthropologists work with architects, urban planners, archaeologists, historians, and other experts. Researchers may learn about the many facets of architecture and urban settings by combining various viewpoints and approaches. This partnership makes sure that social, cultural, and historical factors are taken into account together with technical and practical factors while designing the physical environment. Additionally, the anthropological approach acknowledges the value of including local stakeholders and communities in the investigation and preservation of the built environment. In order to fully comprehend a community's built environment, anthropologists collaborate extensively with its residents. This participatory method encourages a feeling of shared ownership and accountability for the creation and maintenance of the built environment. It guarantees that conservation activities are considerate of the requirements, principles, and goals of the neighbourhood. A useful lens for comprehending the cultural, social, and symbolic aspects of buildings, cities, and landscapes is provided by the anthropological approach to the built environment.

Anthropologists contribute to a more complete and nuanced knowledge of human-environment interactions by researching the meanings, behaviours, and interactions related to the built environment. This method promotes multidisciplinary cooperation, involvement of the local community, and a comprehensive approach to the investigation and preservation of the built environment. The idea that architecture and urban design are exclusively technical or artistic endeavours is contested by the anthropological approach to the built environment. Instead, it emphasises how crucial it is to comprehend how social interactions, cultural values, and lived experiences both influence and are influenced by the physical environment. Anthropologists provide important insights into the social dynamics, power relations, and identity constructions that take place within these settings by analysing how people utilise and interpret architectural environments. The anthropological approach also emphasises the value of regional expertise and indigenous practises in the planning and creation of the built environment. Anthropologists are aware that communities have gathered invaluable knowledge and expertise over the course of many generations, which shapes their construction customs and sustainable practises.

Anthropologists support the preservation and revival of traditional construction methods by recognising and respecting indigenous knowledge systems. This encourages a more inclusive and culturally varied approach to the built environment. The anthropological viewpoint also emphasises the value of teamwork and community involvement in the design and planning processes. Anthropologists support including local populations in decision-making as active stakeholders in order to ensure that their perspectives and goals are heard and included into architectural project design and development. This participatory method fosters a feeling of pride and ownership among communities, resulting in constructed landscapes that are more sustainable

and socially harmonious. The anthropological perspective on the built environment, in general, offers a comprehensive knowledge of the complex relationships between people, culture, and the places they occupy. It challenges us to think about how cultural, social, and historical circumstances have shaped our built environment in addition to the technical components of architecture and urban planning. Adopting this strategy will enable us to build settings that are more inclusive, sustainable, and meaningful and that represent the many needs, values, and ambitions of the populations they serve. The aim of anthropology, according to a previous statement of mine is to "learn about what members of (other) societies and cultures know about the world, the manner in which people come to know what they know, and the ways that they represent and communicate their knowledge.

In a nutshell, knowledge is my area of interest, and I promote knowledge as the main motivation for the conservation sector. This is not done to minimise the enormous value of items; rather, it is done to force acknowledgment of the element that gave those objects their significance in the first place: human intellect and the knowledge it produces. An item becomes vulnerable to new, decontextualized designations of meaning without the knowledge that creates, utilises, or even discards the thing.Meaning is a byproduct of cognition, much like the information each of us has about the universe; it comes from our perceptions of others, the world, and ourselves. It may be changed, along with objects and other concepts. Because a thing cannot reflect on what it is, objects cannot have meaning in and of themselves. Is that objects are unable to think. Since meaning and memory are under the category of thinking, objects cannot "contain" them since only humans (or other living animals) have the capacity to think. All of this ought to appear very simple and apparent. I'm only reiterating my claim that it is implausible to treat any item as having values, essence, meaning, memory, or culture essentiall [5], [6].

In separating the "spirit of the thing" from some conceived notion of its "essence," Law, motivated by Mauss's writings on the spirit (hau) of the gift, states: "The 'originar knowledge' of the object, its hau spirit, comes to be confused with what is deemed to be its primordial essence' (i.e., a pre-existing, immutable truth). The thing's history is not prior to its creation. The thing that transcends the thing and endures its annihilation is not a soul. Instead, the object's spirit is reproduced during its creation and subsequent and ongoing circulation, and it is open to interpretation as it travels through a convoluted network of trade. Following from this, the "systems of knowledge" that give these items significance must have a prominent place on the programme agenda if governments, institutions, and conservation-related professionals are to achieve sustainable conservation of culturally significant objects [7], [8].

We must focus on the individuals the producers and users who successfully create knowledge about artefacts, buildings, and landscapes via their participation in production and use. Not in the thing, but "in" these practises, is the cultural memory embodied. As I said at the opening, the most practical strategy to ensure the regeneration of important resources is probably to save this knowledge as it manifests in the production and consumption processes. Anthropology offers a useful method for interacting with these harder-to-find cultural resources and would likely be very beneficial to other conservation initiatives. More precisely, anthropology offers a framework for evaluating critically the social, cultural, and historical relevance of ideas like space, location, and architecture when it comes to the built environment. It is clear how space conceptually emerged in our society as a reified, quantifiable entity by looking at the historical development of Western theories of space, from Aristotle through mediaeval Christianity and the

Renaissance to Descartes and later Enlightenment figures like Newton. Cross-cultural studies of spatial cognition make its cultural construction even more clear.

In the past ten years, there has been growing support among academics for the idea that place takes precedence over space, inspired by Heidegger's essay "Building, Dwelling, Thinking" (1977) and Merleau-Ponty's Phenomenology of Perception (1962) (Casey 1996; Gregotti 1996:69; Hirsch and O'Hanlon 1995). Because of this, it may be easier to see space as a conceptual extension of our position in the world as sentient beings: first and foremost, we are always "in place." We are positioned because we are constantly immersed in, experiencing, and engaging with our environment. A theory of place that is taken seriously encourages a deeper look at the mechanisms that give a place its physicality and significance. This "making" is examined by an anthropology of space, place, and architecture as comprising the conflicting discourses between contractors, suppliers, architects, planners, governing bodies, conservationists in the case of historical sites, and locals (where the notion of discourse encompasses engagement in all forms of practise). In this case, I'm worried about the architecture, and more specifically the construction methods, at two UNESCO World Heritage Sites: Djenné, Mali, and San'a, Yemen. Traditional builders defined here as those using local materials and construction techniques and gaining their expert knowledge through apprenticeship rather than a technical or formalised education process (Marchand 2001:73) remain largely responsible for much, if not the majority, of the construction in their cities and continue to pass on their knowledge to younger generations of craftsmen in the local communities [9], [10].

CONCLUSION

The study of the built environment from an anthropological perspective provides important information on the social, cultural, and historical aspects of human existence. An increased knowledge of how people interact with and influence their built environment is provided by anthropologists via their research into the meanings, values, and social dynamics ingrained in architectural settings. The anthropological perspective acknowledges that the built environment is a reflection of cultural ideas, social practises, and power relations rather than just a collection of physical buildings. Anthropologists use ethnographic research techniques to immerse themselves in communities to observe and record how people interact with and traverse their built surroundings. This method enables an in-depth comprehension of the cultural meaning and symbolism connected to architecture, urban settings, and infrastructure. The anthropological viewpoint also emphasises the built environment's temporal aspect, acknowledging that it develops and changes through time.

Anthropologists offer insight on the intricate interaction between continuity and transition by investigating historical events that have impacted the built environment, such as colonisation, globalisation, and urbanisation. Additionally, the anthropological method goes beyond traditional academic study to address current issues and advance inclusive and sustainable approaches to the built environment. Urban planning, historical preservation, sustainability, and community development are among the topics that anthropologists work on. They promote the incorporation of local expertise and community involvement in decision-making processes. We may encourage more culturally aware, socially fair, and environmentally responsible architectural practises by adopting the anthropological perspective on the built world. We may design places that reflect and respect the many requirements, values, and ambitions of the people they serve by having a thorough understanding of the cultural, social, and historical components of the built

environment. We can create constructed environments that not only meet practical needs but also enhance the identity and well-being of people and communities via collaboration, involvement, and a thorough understanding of the local context.

REFERENCES

[1] N. Azzopardi-Muscat, A. Brambilla, F. Caracci, and S. Capolongo, "Synergies in design and health. The role of architects and urban health planners in tackling key contemporary public health challenges," Acta Biomed., 2020, doi: 10.23750/abm.v91i3-S.9414.

[2] L. F. Fargher et al., "Wealth inequality, social stratification, and the built environment in Late Prehispanic Highland Mexico: A comparative analysis with special emphasis on Tlaxcallan," J. Anthropol. Archaeol., 2020, doi: 10.1016/j.jaa.2020.101176.

[3] Y. Maru, A. Gebrekirstos, and G. Haile, "Farmers' indigenous knowledge of tree conservation and acidic soil amendments: The role of 'baabbo' and 'Mona' systems: Lessons from Gedeo community, Southern Ethiopia," Cogent Food Agric., 2019, doi: 10.1080/23311932.2019.1645259.

[4] M. Duque, S. Pink, S. Sumartojo, and L. Vaughan, "Homeliness in Health Care: The Role of Everyday Designing," Home Cult., 2019, doi: 10.1080/17406315.2020.1757381.

[5] K. H. Ko, "Origin of Human Language in an Evolutionary Context: Evolution-Progression Model," Adv. Anthropol., 2015, doi: 10.4236/aa.2015.52007.

[6] R. C. Lois González and L. Lopez, "Liminality Wanted. Liminal landscapes and literary spaces: The Way of St. James," Tour. Geogr., 2020, doi: 10.1080/14616688.2019.1647452.

[7] N. Brown et al., "WS01-6 Pathways, practices and architectures: containing antimicrobial resistance (AMR) in the cystic fibrosis clinic," J. Cyst. Fibros., 2019, doi: 10.1016/s1569-1993(19)30122-5.

[8] K. Nicoll and A. Zerboni, "Is the past key to the present? Observations of cultural continuity and resilience reconstructed from geoarchaeological records," Quat. Int., 2020, doi: 10.1016/j.quaint.2019.02.012.

[9] J. C. Caninas, F. Henriques, and F. Álvares, "Apiary-walls and pitfall-traps in Portugal: Archaic constructions for wild animals," in Vernacular Heritage and Earthen Architecture, 2013. doi: 10.1201/b15685.

[10] E. Swenson, "Archaeological approaches to sacred landscapes and rituals of place making," in The Changing World Religion Map: Sacred Places, Identities, Practices and Politics, 2015. doi: 10.1007/978-94-017-9376-6_24.

CHAPTER 21

AN ELABORATION OF THE TRADITIONAL BUILDERS

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ABSTRACT:

Traditional builders are essential to the long-term preservation of the built environment, especially when it comes to conserving architectural history and customary construction techniques. This summary emphasizes the value of traditional builders and their special expertise in guaranteeing the long-term preservation of architectural processes. We can encourage more effective methods of historical conservation that strike a balance between preservation and current demands and sustainability by knowing and appreciating their expertise. Traditional builders have a thorough understanding of the regional resources, methods, and cultural norms that have been handed down through the years. Their knowledge of the environment, the resources at their disposal, and the particular requirements of the community is holistic in nature. This knowledge includes not only the practical elements of building but also the cultural and social contexts related to conventional building techniques. An intricate comprehension of the procedures and methods utilised in the initial building is necessary for the sustainable conservation of architectural history. In order to ensure that restoration and conservation operations are carried out in a way that maintains the integrity of the original design and materials, traditional builders use their experience to appropriately evaluate and interpret historical structures. The authenticity and cultural relevance of historic sites may be preserved thanks to their capacity to operate using conventional materials and methods.

KEYWORDS:

Architectural, Built, Construction, Traditional, Preservation.

INTRODUCTION

In order to preserve architectural history and traditional construction techniques, traditional builders play a crucial role in the sustainable conservation of the built environment. Traditional builders are in possession of priceless expertise and know-how that are firmly ingrained in regional resources, methods, and cultural norms. An overview of the relevance of traditional builders and their part in maintaining the long-term preservation of architectural processes is given in this introduction. We can create more successful strategies for heritage conservation that achieve a balance between preservation, current requirements, and sustainability by knowing and valuing their knowledge. Traditional builders are heirs to a long heritage of workmanship and expertise, and they possess a wealth of knowledge that has been handed down through the centuries. They have a thorough awareness of the local resources, the ecology, and the particular requirements of the neighborhood. Their knowledge of construction goes beyond the technical elements to include the cultural and social issues related to conventional building techniques.

This ingrained knowledge supports the preservation of historical accuracy and cultural relevance, which serves as the cornerstone for sustainable conservation efforts. Understanding the methods and procedures used in the original construction is essential for the sustainable conservation of architectural heritage [1], [2].

Restoration and conservation activities may be carried out in a way that maintains the integrity of the original design and materials thanks to traditional builders' exceptional capacity to evaluate and understand ancient structures. Their skill in using conventional tools and methods guarantees that historic monuments' authenticity and cultural significance are preserved. The environmental sustainability of conventional construction techniques is another important insight provided by traditional builders. These methods often emphasise the use of locally produced and renewable materials, as well as the inclusion of passive cooling and natural ventilation. Modern builders and architects may include sustainable aspects into new building and restoration projects, minimizing environmental effect and improving energy efficiency, by researching and modifying old procedures. Traditional builders' participation in the conservation process also encourages ownership and community involvement. Their expertise and abilities are intricately entwined with regional customs and cultural history, fostering pride in and a feeling of connection to the built environment. Participating local groups in conservation initiatives not only guarantees the survival of cultural uniqueness but also fosters social sustainability and strengthens neighbourhood economy. The skill of traditional builders is crucial to the long-term preservation of the built environment. They are absolutely necessary for maintaining architectural history and incorporating sustainable components into the restoration process because to their expertise, abilities, and comprehensive awareness of local materials and cultural practices [3], [4].

We may take a more inclusive and thorough approach to historical conservation that respects cultural identity, promotes sustainability, and ensures the preservation of our architectural history by working with traditional builders and incorporating local communities. ancient builders operate as stewards of cultural heritage, maintaining not just the actual buildings but also the craftsmanship and esoteric knowledge connected to ancient construction methods. Their commitment to preserving conventional methods and supplies fosters the intergenerational transfer of knowledge and supports the continuity of cultural identity. Traditional builders also provide a feeling of place and a connection to regional environments. Because they are aware of the local context, they can incorporate structures into the landscape in a way that respects ecological processes and has a minimal negative influence on the environment. This strategy encourages a more comprehensive and responsible approach to building and conservation, which is consistent with the ideals of sustainability.

Additionally, including traditional builders in the protection of the built environment helps promote cooperation and information sharing among many stakeholders. Using the knowledge and experience of traditional builders, architects, environmentalists, and local residents may collaborate to integrate cutting-edge technologies with time-tested methods. We can guarantee the ongoing preservation of architectural history while encouraging sustainable growth by acknowledging and assisting traditional builders. Traditional construction techniques may be preserved and handed down to future generations via training programmes, capacity-building efforts, and policy assistance, adding to the resilience and cultural richness of our built environment. Traditional contractors are essential to the long-term preservation of the built environment. They provide a basis for the preservation of architectural history and the incorporation of sustainable principles because of their in-depth knowledge, expertise, and

awareness of regional materials and cultural practises. We may promote a more inclusive, culturally sensitive, and ecologically responsible approach to the preservation of our built environment by appreciating and involving traditional builders. Their knowledge acts as a link between the past and present, ensuring that the legacy of conventional construction techniques survives in a world that is changing quickly [5]–[7].

DISCUSSION

In contrast to most other oil-rich Arabian towns, Yemen's capital has maintained a significant portion of its preindustrial identity and distinctive architectural environment despite greater engagement with Western and modernised Arab nations since its 1962 revolution. However, in the 1970s, new capital inflows and a growing economy caused San'a to experience rapid urban growth. As a result, many of the city's established families with sufficient financial resources exchanged their tower homes in the old historic core for contemporary villas in the cleaner and more convenient suburbs.

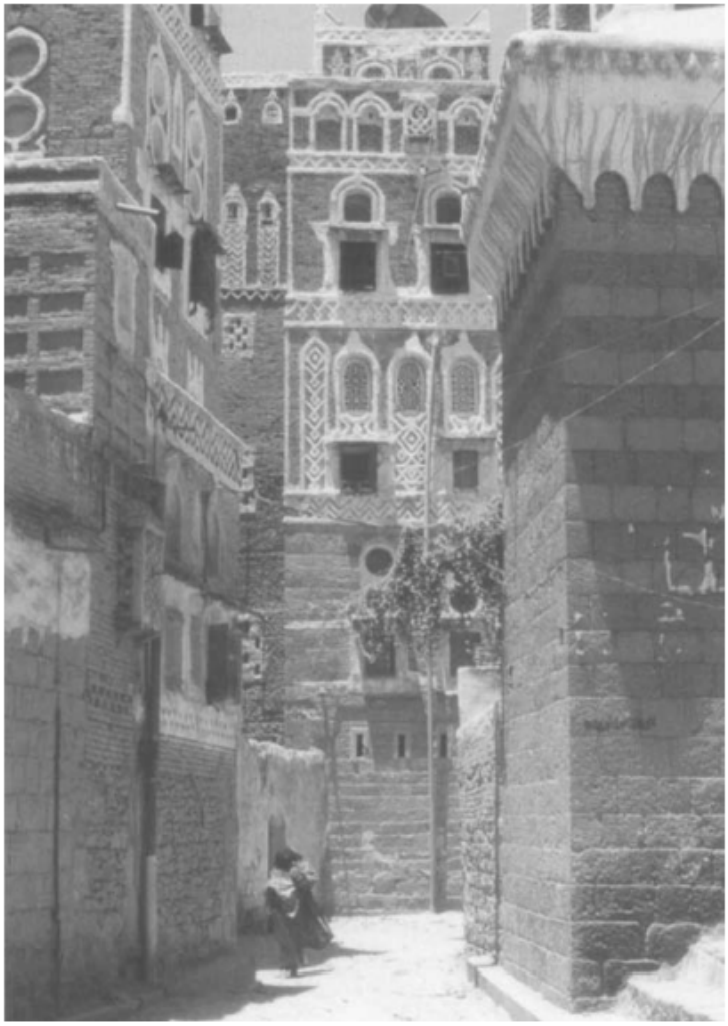

Figure 1: Street scene in the old city of San'a' (1997). Sana'a' was declared a World Heritage Site by UNESCO in 1984. Photo by Trevor Marchand [getty].

Historic structures and related practises were seriously threatened by the exodus of wealthy patrons who had the funds to build and maintain the traditional San'a'ni-style architecture, the near total absence of municipal planning initiatives and building regulations, and the introduction of new construction materials and methods. In response, a resolution to create a plan for the city's preservation and restoration was approved by the UNESCO General Conference in 1980. In addition to encouraging greater worldwide acknowledgment of the city's rich architectural legacy, UNESCO's 1984 designation of San'a as a World legacy Site also stoked local interest in architecture as a cultural treasure. Residents of the city began to identify the distinctive local architectural design not only with the social standing of the clients but also with the tourism it draws and, therefore, with the hard dollars that foreign tourists provide to the local economy. (View Colour Plate 9 in Figure 1) Yemen's national identity is heavily influenced by traditional architecture as the nation increasingly understands itself via its relationships with other nations on the international arena.

The previous seclusion of North Yemen under the theocratic leadership of the Zaydi imams). This association with "tradition" is complex and incorporates opposing views on the need to preserve traditional practises. Identity creation is greatly shaped by one's perceptions of the areas where "we" or the "other" live, as I have already indicated (2000c:49). Like many Middle Eastern towns, San'a's historic centre is often seen by foreigners as a staunchly devout outpost that upholds archaic principles and customs. Such beliefs and behaviours are seen to be at odds with the fight for democracy and a modernised economy. Contrary to popular belief, the Old City is concurrently portrayed as a repository of Yemeni customs and values that must be protected against invasive foreign influence and dominance. The burden of upholding the virtue and moral order of the previous generations falls on the resident people.

Slow economic growth has played a significant role in supporting the survival of indigenous construction practises and replication of the urban environment, in addition to growing international and local awareness of San 'a's architectural history and the question of cultural identity. Due to Yemen's economy's poor performance over the past 20 years, economic sanctions imposed on the nation by Saudi Arabia and the Gulf States following the Gulf War, as well as a civil war between the north and south in 1994, the importation of contemporary (read: Westernised) construction materials and methods has largely become unaffordable for the majority of the population. Not only has a large portion of the current housing stock been kept up due to Despite these budgetary limitations, the city's traditional master masons have continued to earn contracts for brand-new buildings that use more easily accessible and less expensive local materials. Importantly, the traditional construction trade has spread the essential knowledge and skills, as well as the expert discourse, via the rehabilitation of the built environment. pertaining to the master mason. In stark contrast to those working in the city with contemporary materials and equipment, these masons identify as taqliddi (traditional), and they profitably manage this identity via speech. The elite of the society have rekindled their interest in indigenous construction techniques as they want to take San'a'ni-style architecture as a status symbol.

In the construction of new villas, office buildings, and governmental institutions, ornamental motifs are applied to veneer, fanlights are carved from plaster and stained glass, and exquisite interior plasterwork is used. However, several of the city's well-established families have returned to their family residences in the Old City or have financially supported their preservation. A number of new tower homes have been built in the historic centre and its surrounding neighbourhoods, increasing the vertical height of their tower houses by adding more

floors. The highest room in the home, the manzar, is where most men gather in the afternoons to chew qat. It is lavishly adorned and has windows that look out over the city to the mountains beyond. Building commissions for religious structures like mosques, minarets, and madrasahs are a significant additional source of work that has helped to keep the traditional sector of the industry alive. The majority of the time, they are supported by donors who want to "leave behind good works" (sadaqah) as a (public) testament to their religious piety and social position I spent a lot of time in the field working with a group of local craftsmen in San'a who were experts in building mosque minarets between 1996 and 1998. I actively engaged in the construction process as a worker during these courses in order to comprehend the social, political, economic, and technical facets of construction. My research was mostly concerned with the transfer of specialised knowledge via the apprenticeship system.

The conclusion that "it is not the particular objects produced by the trade, but rather the Master-apprentice relation which distinguishes traditional craft production" (Marchand 2001:246) is directly relevant to my viewpoint on conservation favouring process over product. The following chapter provides a concise summary of the San'a'ni apprentice's training. The builder's education goes well beyond just imparting the knowledge required to reproduce his trade, and is profoundly anchored in the development of his identity. To create a person who is capable of acting, thinking, and comprehending within the parameters of their profession, discipline must be developed in both the mind and the body. Inherent attributes of the usta [Master Builder] include discipline, a steadfast attitude of superiority, and competent performance, and it was the inculcation of these three throughout the training process that established his expert position. The al-Madrasah Mosque's minaret, which was built in A.D. 1519–1520, is regarded to be San'a's first example of its sort. Its shape, size, and ornamental brick design have served as models for minaret architecture throughout the city up to the present. The whole minaret is made of kiln-baked brick and is covered with artistic relief carvings, the majority of which are geometric in design. Nearly every minaret in San'a is a freestanding, imposing building, like the al-Madrasah. They are made up of an elevated square-planned base, a tall, circular or polygonal columnar shaft, a projecting calling platform, an elongated octagonal tower with proportions that are thinner than the shaft below, and a hemispherical or fluted dome to top it all off. By virtue of its appealing dimensions and brickwork, the Musa Mosque's 1747–1748 minaret is regarded as the pinnacle paradigm of San'a' ni minarets, and it served as a model for the early works of the al-Maswari family master masons, with whom I collaborated.NEarly in the 1980s, the al-Maswari brothers started constructing minarets, and by the middle of the 1990s, they and their crew had built approximately twenty-five of them in and around San'a. With the exception of a few that were constructed completely of stone, all of their minarets were made of kiln-baked brick towers that were supported by black stone plinths. Each building was unique in that it had a different height (some rose over sixty metres), somewhat different proportions between parts, different ornate brick-relief patterning, and either a hemispherical or elegantly fluted dome. The builder internalised a structural framework of possibilities in his ideas and practises, and as a result, he learned to master it throughout the course of his training. These possibilities included higher height, four proportions, and embellishment [8]–[10].

Such a structural framework is neither static nor existing before the builder's active physical and mental participation in his profession. In actuality, such a structural framework is created and continuously repeated via his thinking (about) possibilities and his (potential) performance. His creative urges to come up with original shapes and ornamentation were restrained by a controlled

rationale.What could be accomplished practically with the tools and materials on hand; what could be done by his team in view of their capacities, both physically and vocationally; what was agreed upon as desirable by his clients in terms of scale, style, and quality of construction; and, nota bene, the qualitative properties of [the Master Builder's] reasoning that guided his decisions and disciplined his creative imagination For instance, Figure 2 [the Master's] thinking in respect to the latter focused his creative ambitions inside the conceptual bounds of what has historically been designated "traditional" in the city, thereby harnessing his creativity for minaret construction.

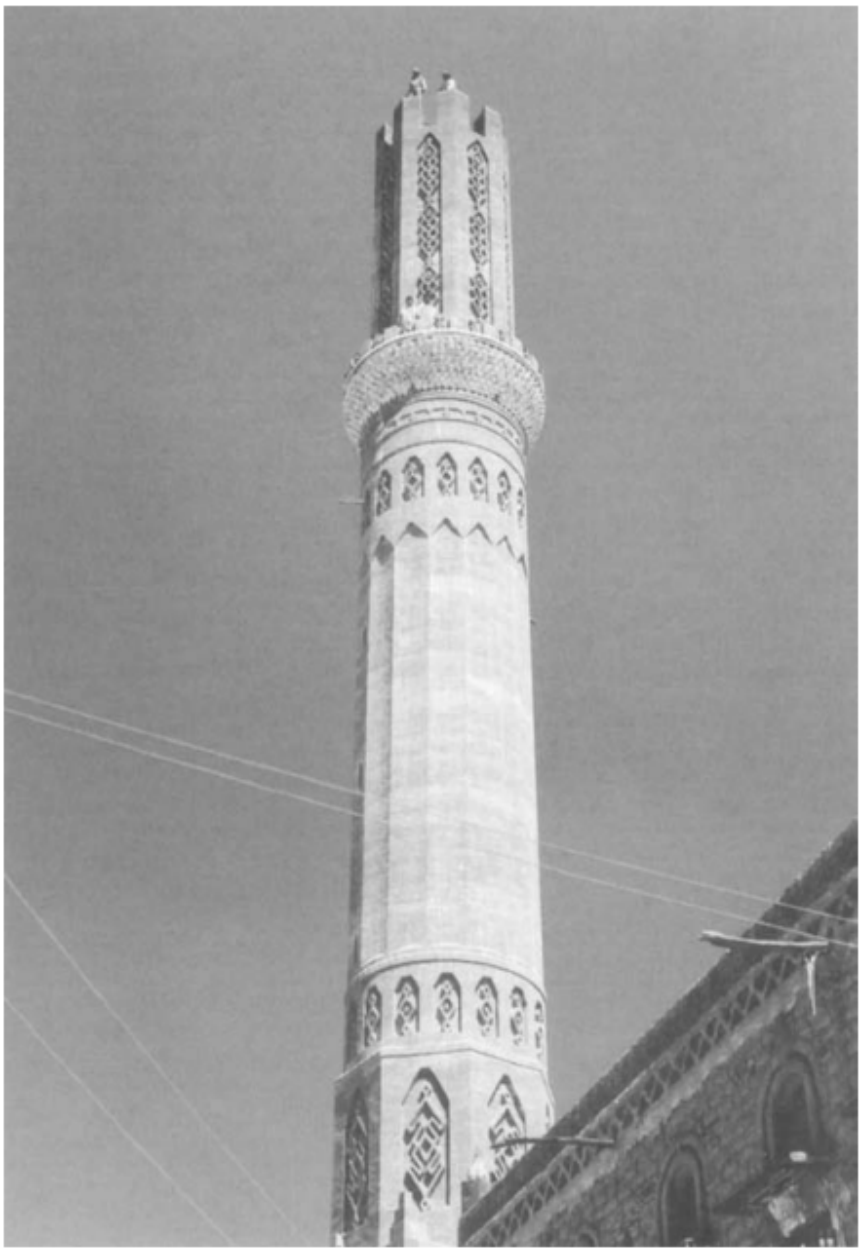

Figure 2: Construction of the minaret for the Addil Mosque, San'a', led by the al-Maswari family of masons (1996). Photo by Trevor Marchand. [getty].

The expert reputation of the builder was seen to depend on their ability to blend reason and imagination. With the help of his apprentices, he was able to preserve the expertise needed for the renewing processes and imaginatively revitalise the "traditional" architectural environment of San'a'. However, it was noticed that imparting the learned balance between reason and imagination was not similar to the simpler teaching of craft-related skills to young builders for easy replication reasons. Instead, the development of this quality is strongly influenced by the apprentice's innate traits as well as the strength of the relationship that develops between the instructor and student during the apprenticeship. The young builder has to have an inner calling that is based on his technical skills, career goals, and ambitions to reach the highly concentrated degree of intentionality for "doing what is beautiful" in his trade, maintaining the apprenticeship system and, therefore, the relationship between the master and apprentice, is essential for preserving trade knowledge and revitalising San'a's architectural history. Consequently, the apprenticeship process, which is defined as the dissemination of I consider these factors—technical proficiency, social and moral responsibility, and professional standing—to be the proper things to conserve. Multiple planning the construction of trade schools has been suggested by experts and architects concerned with the preservation of San'a's built environment...

CONCLUSION

Due to their experience and knowledge, traditional builders play a crucial role in the sustainable conservation of the built environment by preserving the architectural past and incorporating sustainable practises. In addition to preserving historical accuracy, maintaining traditional construction methods develops a stronger sense of cultural identity and advances social, economic, and environmental sustainability. Traditional builders can evaluate, interpret, and repair old structures with a thorough grasp of the original design and materials thanks to their special expertise and abilities. They preserve the authenticity and cultural relevance of historic places by using traditional materials and methods of construction. Additionally, they are able to include sustainable components into new building and restoration projects because to their flexibility in adapting conventional methods to modern requirements. In addition to becoming guardians of cultural legacy, traditional builders also pass on their expertise to future generations. Their participation in the conservation process fosters community ownership, pride, and engagement. The sustainable protection of the built environment becomes a shared duty through respecting and engaging local communities, promoting social sustainability, and boosting local economies.

Furthermore, it is important to consider how sustainable old construction methods are for the environment. The use of locally produced and renewable materials, together with age-old construction methods that emphasise passive cooling and natural ventilation, is consistent with sustainability ideals. Modern builders and architects may lessen their negative effects on the environment and increase energy efficiency in building and conservation projects by researching and using these techniques. In order to conserve the built environment in a sustainable way, traditional builders are essential. Their knowledge of conventional methods, supplies, and cultural customs guarantees the preservation of historical accuracy, encourages neighbourhood involvement, and advances environmental sustainability. For the continuation of cultural heritage, the advancement of sustainable development, and the preservation of our architectural history for future generations, it is essential to acknowledge and encourage the work of traditional builders. We may accomplish a more comprehensive and responsible approach to the

protection of our built environment via cooperation and the fusion of traditional knowledge with contemporary innovations.

REFERENCES

[1] R. Tomovska and A. Radivojević, "The role of master-builder in development of traditional Ohrid house," SAJ - Serbian Archit. J., 2016, doi: 10.5937/saj1601023t.

[2] I. G. P. Suharta, I. G. P. Sudiarta, and I. W. P. Astawa, "Ethnomathematics of Balinese Traditional Houses," Int. Res. J. Eng. IT Sci. Res., 2017, doi: 10.21744/irjeis.v3i4.501.

[3] B. U. Salim, I. Said, L. Y. Lai, and R. N. R. Shahminan, "Driving factors of continuity for kano emir palace towards safeguarding its cultural heritage," Pertanika J. Soc. Sci. Humanit., 2020, doi: 10.47836/pjssh.29.3.09.

[4] B. E. Young, R. D. Seidu, M. Thayaparan, and J. Appiah-Kubi, "Modular construction innovation in the UK: The case of residential buildings," in Proceedings of the International Conference on Industrial Engineering and Operations Management, 2020.

[5] G. Warren-Myers and C. Heywood, "A new demand-supply model to enable sustainability in new Australian housing," Sustain., 2018, doi: 10.3390/su10020376.

[6] P. Keshtkaran, "Harmonization between climate and architecture in vernacular heritage: A case study in Yazd, Iran," in Procedia Engineering, 2011. doi: 10.1016/j.proeng.2011.11.2035.

[7] Y. Sheng, X. Xu, W. Jiang, Y. Song, S. Gan, and H. Zou, "Application of oxidized cornstarch as a nonphosphoric detergent builder," J. Surfactants Deterg., 2012, doi: 10.1007/s11743-012-1329-0.

[8] A. R. S. Chaudhary, "The integration of climate responsive design and traditional settlement in high altitude-A case study of spiti valley," Int. J. Civ. Eng. Technol., 2017.

[9] J. A. W. H. van Oorschot, J. I. M. Halman, and E. Hofman, "The continued adoption of housing systems in the Netherlands: A multiple case study," J. Constr. Eng. Manag. Innov., 2019, doi: 10.31462/jcemi.2019.04167190.

[10] J. Wang, Y. Xiao, T. Li, and C. L. P. Chen, "A Survey of Technologies for Unmanned Merchant Ships," IEEE Access. 2020. doi: 10.1109/ACCESS.2020.3044040.

CHAPTER 22

AN OVERVIEW OF THE CASE OF DJENNE

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ABSTRACT:

focuses on the situation in Djenné, Mali, which is a UNESCO World Heritage Site known for its traditional construction methods and the iconic Great Mosque of Djenné. The Djenné instance is a potent illustration of the value of conserving traditional construction techniques as well as the difficulties in preserving the authenticity and sustainability of old buildings. This abstract discusses the importance of traditional construction techniques and their applicability in the context of sustainable conservation by studying the distinctive architectural history of Djenné. The characteristic mud-brick building of Djenné, which has been used for centuries, is well recognised. A stunning example of Sahelian architecture and a tribute to the creativity and skill of traditional builders is the Great Mosque of Djenné. However, there are several obstacles to the protection and preservation of Djenné's architectural legacy, including socioeconomic concerns, urbanisation, and climate change. These difficulties emphasise the need for sustainable methods to safeguard conventional construction techniques and guarantee the durability of the buildings. The local community's culture and customs are profoundly ingrained in the traditional construction methods used in Djenné. Mud-brick building requires specialised knowledge and skills that are handed down through the generations, fostering a strong feeling of cultural identity and communal cohesiveness. The maintenance of these customs not only keeps the architecture genuine, but it also fortifies social relationships and instills a feeling of pride in the community.

KEYWORDS:

Architectural, Conservation, Construction, Traditional, Techniques.

INTRODUCTION

The instance of Djenné, which is situated in Mali, West Africa, offers an enthralling illustration of the relevance of conventional construction techniques and the difficulties encountered in maintaining the authenticity and sustainability of old buildings. The famous Great Mosque of Djenné and the city's distinctive mud-brick structures are among Djenné's most well-known architectural landmarks and serve as examples of the inventiveness and skill of traditional builders. An overview of Djenné's architectural history, the cultural significance of traditional construction techniques, and the challenges of sustainable restoration efforts are given in this introduction. The thriving city of Djenné, which has been a UNESCO World Heritage Site since 1988, was a hub for Islamic study and commerce between the 13th and 17th centuries. Its use of mud-brick building, a method profoundly ingrained in the history and customs of the local people, is what distinguishes its architectural legacy. Scholars, architects, and visitors have all been drawn to the distinctive features of Djenné's mud-brick structures, which have helped to establish it as a recognised example of African architectural history. The pinnacle of Djenné's

architectural heritage is the Great Mosque of Djenné, a soaring building that dominates the city skyline. The mosque, which was first built in the 13th century and then rebuilt in the early 20th century, exhibits the exceptional skill and expertise of mud-brick building. Its distinctive characteristics, such the torons (wooden beams) and the elaborate relief patterns, demonstrate how indigenous construction customs and Islamic architectural influences came together to create this structure. The legacy of Djenné's architecture faces several difficulties. The integrity of the mud-brick buildings and the conventional construction techniques are threatened by climate change, urbanisation, and socioeconomic reasons. The mud-brick walls are eroding and deteriorating as a result of rising temperatures, variable rainfall, and increasing humidity. Furthermore, urbanisation introduces contemporary building supplies and procedures that could not complement the traditional Djenné aesthetics and building practises. Socioeconomic issues like population increase and economic pressures might cause the historic structures to not be properly maintained or altered [1], [2].

But preserving Djenné's architectural legacy involves more than just physical protection; it also involves maintaining cultural identity and communal resiliency. The social structure and cultural customs of the neighbourhood are closely entwined with the traditional construction methods used in Djenné. Since mud-brick building knowledge and skills have been handed down through the centuries, there is a feeling of pride and a close relationship to the built environment. In addition to guaranteeing the integrity of the building, the maintenance of these customs also promotes social cohesion, a feeling of community, and cultural continuity. In Djenné, sustainable conservation necessitates striking a fine balance between maintaining conventional construction methods and taking on the logistical difficulties of sustaining ancient buildings. Mud-brick construction is sustainable and easily accessible, but it needs constant upkeep because to its vulnerability to erosion and disintegration. The mud-brick buildings are being protected and strengthened, and efforts are being made to do so while maintaining their traditional aesthetics and building techniques.

These include the use of shielding materials, enhanced drainage techniques, and strengthened foundations. Furthermore, preserving Djenné's architectural legacy requires a comprehensive strategy that involves the engagement of regional groups, traditional builders, conservation specialists, and governmental organisations. To make sure that conservation activities are economically feasible, socially inclusive, and culturally sensitive, community engagement is essential. When making conservation choices and putting sustainable practises into practise that meet the needs and ambitions of the community, local knowledge and experience are crucial. the Djenné instance serves as an illustration of the value of conventional construction techniques and how they may be included into long-term conservation initiatives. The historical architecture of Djenné is a striking example of the blending of Islamic and local customs, showing the extraordinary skill and cultural value of mud-brick building [3], [4].

DISCUSSION

I started fresh research in Djenné with a group of traditional builders at the beginning of 2001 to compare construction techniques and apprenticeship. This was the first stage of a planned multi-phase study project using Djenné masons. I'll use this chance to share some of this new information, concentrating on specific instances in the building of a brand-new traditional Tukolor home to highlight key processes. I want to show how, among other important social and economic institutions of Djenné, the practise of magic, religious research, and the cyclical

character of the local economy, the construction process is intricately tied to a number of these institutions. The (at times complex) social relations among the builders of the barey tonne (the builders' organisation), between the masons and their labour force, and between the masons and clients are crucial to understanding building practises and the regeneration of the traditional built environment in Djenné. The connection between the masons and the (Dutch-sponsored) conservation activities in Djenné must also be briefly taken into account. I would advocate for even more decision-making autonomy for both the masons and the locals in future interventions at Djenné, even though I think that these efforts have been very well-informed and that those in charge have successfully incorporated the customs and worries of the local masons into their project objectives. (See fig 1)

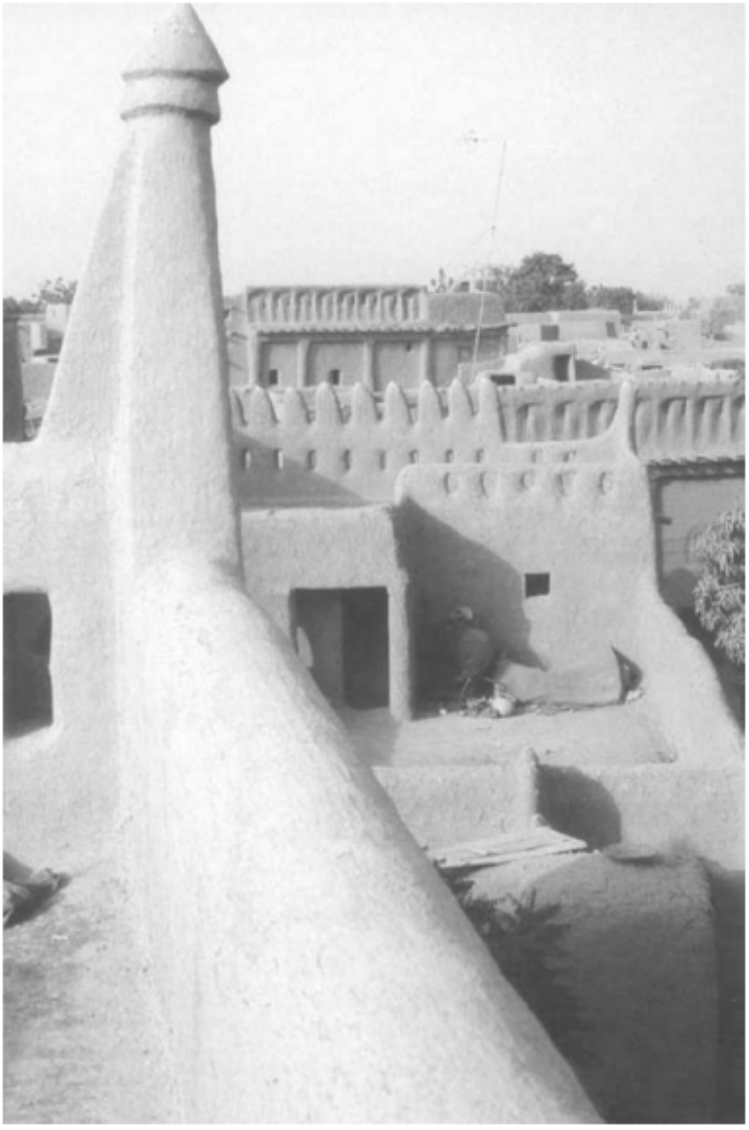

Figure 1: View over the crenellated rooftops of Djenné (2001). Photo by Trevor Marchand [getty].

A network of canals links the neighbouring Bani River, a significant tributary of the Niger River, to Djenné, an old trading centre in Mali's Inland Niger Delta. In the past, it functioned as a

significant crossroads for the commerce of salt, copper, and Mediterranean commodities crossing the Sahara through Timbuktu as well as the trade of gold, ivory, kola, and slaves travelling north from the southern woods and savannah. It seems that somewhere between A.D. 1200 and the present day, the city's current location replaced the previous village of Djenné-Djeno, located three kilometres distant. When the latter was abandoned, it was 1400. excavations at Djenné-Djeno have indicated continuous habitation there from the third century B.C. The earliest city in sub-Saharan Africa is believed to have existed from the third century B.C. until about the year 1400 A.D. was only known to the Western world from the fourteenth century until it was conquered by the French in 1893 via the few accounts of merchants, chroniclers, and adventurers.

Rousseau, a military physician, took the city's first photographs soon after the French conquest and the documentary photos taken by journalist Félix Dubois before the turn of the century have served as a benchmark to track changes in the city and its architecture over the last century and provided a "arbitrary model for restoration [5], [6]. The architecture of Djenné and Timbuktu captured the attention of the French, who used them as models for the Sénégal-Soudan pavilion at the Paris Universelle Exposition in 1900 and the citadel of French West Africa at the Marseille Colonial Exposition in 1922. These illustrations, known as style-soudanaises, according to Prussin "established the architectural prototype for France's entire West African Empire."

As it has the potential to be used with the architecture of the region, both artistically and geographically, is difficult to correct, and the A bewildering array of theories of definition are enmeshed in the hunt for one. origins. In an effort to provide a functional definition based on the The fundamental elements of the style are "a courtyard layout; a flat or dome-shaped a vaulted roof, parapets with gutter pipes or channels piercing them, and walls that are mud roofs are supported by palm frond joists and formers, and the buildings are made of mud bricks laid in mud mortar. She goes on to say that if such a If style can be stated to exist in any coherent way, then it probably saying "it existed before the spread of Islam and was primarily urban". Prussin thinks that Djenné is the origin's hub and that Islamic traditions from North Africa were combined with the ancient Sudanese culture. describing the building as being made up of native savannah forms fabric that incorporates certain aspects of North African Islam, such as According to "gold or coloured threads (1989)". Domian additionally puts out the argument that Sudanese architecture is unique. Achieved its pinnacle in Djenné, but he backs up the idea that the fashion Due to the city's "relative isolation," its creation is mostly indigenous. a mercantile class from the Sahara that, in contrast to Timbuktu and Gao's population was mostly sub-Saharan, not immigrant. In this essay, they describe the rehabilitation of Djenné, Bedaux, and others (2000:205) also reference the well-known academic theory. recognising that this building "has practically become a symbol of national identity" (see also Djenné roots for the style-soudanaise) Rowlands (to be released). The creation of the physical environment in Djenné and the spread of the design in the area must be credited to the city. The barey tonne is an association of masons. Tonne is a Mande indication for volume. for either professional organisations, such as those for hunters [7], [8].

Based on the lunar calendar and constellations, among other things, and awarded via a potentially gerontocracy neighbourhood network include the males of his family, his own master, and marabouts. Beginning work on that particular day could just include hoeing dirt where a foundation trench would subsequently be dug, as it was at my site. After the somewhat uneventful site inauguration and before the start of serious building work, the client's mason and

he paid the master mason he hired to complete the construction job. a group outing to the location carrying a handmade basket of diverse grains. They start a mound of stones that had been brought earlier, he chose four melon-sized stones. Guy arrived a pickup and began to benedict them. The blessings Spread over the stones, one by one, by each of the masons, was a mixture. Numerous Qur'anic verses and enchantments in the Djenné Chiini dialect of the area language. Nearly undetectable volumes made sure that the masons maintained their own. "Secrets" kept hidden from one another and everyone else at the same time time making a show of their strength and knowledge in front of the people. The mason knelt before the four after uttering the magic words.

Stones before spitting into his palm with his right hand outstretched. Massaged the stones with his open hand in a clockwise motion. He done this multiple times, giving the stones themselves the power of his blessings. The influence of language in West African Mungo Park recognized context while on his travels in 1795. Stoller observes that words "are not just neutral A mason once stated to me, "You have instruments of reference, but they can be dangerously charged with the powers of the heavens and of the ancestors." know how to write, but people in Djenné are familiar with the floraand trees alluding to their therapeutic qualities, and we masons have the We are aware of secrets and incantations; power of words. Then the masons performed a similar blessing on the grain basket. The main mason for the client explained why the grains are not a because of where the grains originate, it is a fetish connected with pre-Islamic customs. God. He once said to me, "God created man, but God made woman to have children. God also conferred to people the ability to do so by giving them the Cottonseed, sorghum, millet, ma's, fonio, and rice made up the combination of grains, which gave certain people the authority to carry out ceremonies and benedictions that are always done in His name.

It was clarified that the initial generates the items we wear, while the others provide us with food, and In order to assure prosperity and an abundance of food for the community, grains are placed in the house foundations and in the property's corners. Inhabitants. The mason said, "If the benedictions are done properly, if they are, God will provide aid; if not, God will not. Will complete the project." Both masons then dug four small holes at using their hoes, the four corners of the property. Each contained one.from the preferred stones and some of the grain was sprinkled on top of them. Before hand-backfilling the holes with the mixture. a stockpile of cereals would be preserved on site and poured into the foundations of the outside walls. Of the home as the task progressed. During construction, a number of ceremonies were carried out, including the blessing of the surviving horse bones and the burying of an amulet in the foundations of the embankment wall along the river. Simple recitations of "brims Allah" (In the Name of Allah) by the marabout God) to start fresh building phases. Tactful and Some of the individuals also engaged in very intimate rituals. Masons work every day. Each morning before starting work, squatting atop the mud-brick walls, facing a new mortar blob

The bricks were ready to be laid when a worker put them there, and one mason conducted his own rite. Glancing down at his right hand's exposed palm He touched each of his fingers repeatedly with the tip of his thumb at roughly the same height as his index finger, murmuring repetitive, almost audible incantations. Each digit's center point, methodically advancing from his pinkie his pointer pointed inward. He would complete, stop for a while, and choose set a block and start constructing. He informed me that he would not reveal his identity. Merely that he had learnt it from his father, who had taught it to him earlier. The procedure ensured quality

work and safety on the jobsite for him all through the day. A "guarantee" was a contentious topic. With ideas of knowledge and how a professional identity is built [9], [10].

CONCLUSION

The situation in Djenné, Mali, is a potent illustration of the value of retaining traditional construction techniques as well as the difficulties in preserving the authenticity and sustainability of old buildings. Mud-brick structures and the famous Great Mosque are hallmarks of Djenné's architectural history, which is of enormous cultural and historical value. In addition to maintaining the actual buildings, preserving Djenné's architectural legacy is crucial for fostering community resilience and sustaining cultural identity. The generational transmission of traditional construction techniques in Djenné fosters a feeling of pride and camaraderie among the locals. These customs have a strong cultural foundation and exhibit a rare blend of Islamic architectural elements and regional handicraft. However, there are a number of obstacles to sustainable conservation in Djenné, including socioeconomic reasons, urbanisation, and climate change. Mud-brick buildings erode and deteriorate as a result of rising temperatures, variable rainfall, and increasing humidity. Modern building materials and procedures brought on by urbanisation may not complement Djenné's traditional aesthetics and building practises. The preservation and renovation of historic structures may also be impacted by socioeconomic issues including population expansion and economic constraints.

It is essential to take a comprehensive and cooperative strategy to addressing these issues. To create sustainable conservation plans, local communities, traditional builders, conservation specialists, and governmental organisations must actively participate. Community involvement makes ensuring that conservation initiatives are sensitive to cultural differences and inclusive of all social groups, taking into account the knowledge and ambitions of the local populace. Using their knowledge of mud-brick building and conventional methods, traditional builders play a crucial role in directing conservation choices. Innovative conservation strategies are being investigated in addition to community engagement to save and strengthen the mud-brick buildings. To maintain the durability of the structures, several tactics are used, including the use of protective coatings, enhanced drainage systems, and strengthened foundations. These strategies aim to strike a compromise between the practical difficulties presented by urbanisation and climate change and the preservation of traditional aesthetics and skills. The Djenné instance emphasises how important it is to combine aims for sustainable development with cultural asset protection. Djenné serves as a paradigm for the sustainable conservation of ancient buildings by adopting traditional construction techniques and integrating local populations. In addition to preserving cultural identity, Djenné's architectural history also promotes social harmony, economic growth, and environmental sustainability. the Djenné instance highlights the value of conserving ancient construction techniques and the difficulties associated with long-term conservation initiatives. The mud-brick buildings of Djenné combine regional workmanship with Islamic architectural influences, leaving behind a rich cultural heritage. Djenné serves as an example of how the preservation of architectural history may support community resilience and well-being while fostering sustainable development for future generations by addressing the issues and involving the local community.

REFERENCES

[1] M. J. Arnoldi, “Cultural patrimony and heritage management in mali: The old towns of djenné and the sanké mon festival,” Afr. Today, 2014, doi: 10.1353/at.2014.0035.

[2] T. H. J. Marchand, "Endorsing indigenous knowledge: The role of masons and apprenticeship in sustaining vernacular architecture - the case of Djenne," in Vernacular Architecture in the 21st Century: Theory, Education and Practice, 2005. doi: 10.4324/9780203003862.

[3] S. K. Mcintosh, "Modeling political organization in large-scale settlement clusters: a case study from the Inland Niger Delta," in Beyond Chiefdoms, 2009. doi: 10.1017/cbo9780511558238.006.

[4] J. P. Boitte, J. Traoré, F. Boukhet, J. M. Mondié, M. Traoré, and B. Delbosc, "Adenoid cystic carcinoma of the lacrimal gland in a 14-year-old girl," J. Fr. Ophtalmol., 2006, doi: 10.1016/s0181-5512(06)70117-6.

[5] P. Probst, "Picturing the Past: Heritage, Photography, and the Politics of Appearance in a Yoruba City," in Reclaiming Heritage, 2018. doi: 10.4324/9781315421131-4.

[6] F. Almeida-Souza et al., "1,4-disubstituted-1,2,3-triazole compounds induce ultrastructural alterations in leishmania amazonensis promastigote: An in vitro antileishmanial and in silico pharmacokinetic study," Int. J. Mol. Sci., 2020, doi: 10.3390/ijms21186839.

[7] B. Sorgho et al., "Strength and creep behavior of geomaterials for building with tannin addition," Mater. Struct. Constr., 2014, doi: 10.1617/s11527-013-0104-7.

[8] Alex Flynn, "Front and Back Covers, Volume 29, Number 5. October 2013," Anthropol. Today, 2013, doi: 10.1111/1467-8322.12054.

[9] L. Souag, "The subclassification of Songhay and its historical implications," J. African Lang. Linguist., 2012, doi: 10.1515/jall-2012-0008.

[10] A. W. Massing, "Imams of gonja the kamaghate and the transmission of Islam to the Volta Basin," Cah. Etud. Afr., 2012, doi: 10.4000/etudesafricaines.16965.

CHAPTER 23

TRADITION AND INNOVATION IN THE TIBETAN DIASPORA

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ABSTRACT:

the importance of tradition to Tibetan groups residing outside of Tibet in preserving their cultural identity and resilience. It explores the difficulties and possibilities that Tibetan groups in the diaspora encounter as they attempt to transmit and preserve their traditional practises, rites, and values in new and different cultural situations. This abstract gives insight on the dynamic interaction between tradition and adaptability in the face of displacement and globalisation by looking at the role of tradition in the Tibetan diaspora. Political changes in Tibet, notably the Chinese occupation in the 1950s, led to the emergence of the Tibetan diaspora. In search of safety and independence, Tibetan refugees and exiles scattered to a number of nations, including India, Nepal, Bhutan, and Western nations. retaining and safeguarding Tibetan customs became essential throughout this diaspora experience for retaining cultural identity and establishing ties to the ancestral motherland. However, there are several difficulties in maintaining and passing down Tibetan traditions in the setting of the diaspora. The first generation of Tibetan exiles had to adjust to new cultural contexts while still passing down their traditions to their offspring and future generations. In a complicated dynamic where tradition had to be maintained while simultaneously taking into account the reality of the diaspora experience, the loss of direct touch with the Tibetan homeland and the constraints of assimilation in host nations.

KEYWORDS:

Architectural, Diaspora, Tibetan, Tradition, Traditional.

INTRODUCTION

A forced exodus of thousands of Tibetans into India in 1959 included crossing the Himalayas. Currently, there are around 130,000 people living in exile, mostly in the over fifty settlements dispersed throughout India and Nepal but also in Bhutan, Europe, the United States, and Canada. The Tibetan community in exile has been effective in managing the resettlement process and providing for the fundamental needs of an increasing number of refugees over the last 40 years. The survival of their endangered culture is now their greatest problem, not their physical existence. Tibetans, who have been uprooted and scattered, go through a difficult adaptation process and fight to preserve the sustainability of their distinctive way of life. Community leaders have often urged their people to remember, to make an effort to incorporate traditional knowledge and values into their changing lives and new professional interests, and to pass on their history to the next generation in order to prevent it from being lost [1]. The existence of "Tibetan-style buildings" whenever a new settlement is founded is one of the most obvious indications of this adherence to tradition. These towns have a sense of identity thanks to a traditional temple or monastery, which are often scaled-down reproductions of the ones that were

abandoned, or to distinctive features decorating modest dwellings, which serve as tangible memories of the community's tenacity.

I visited many of these Tibetan communities when I first arrived in the Himalayas in 1990, partly because I was curious about the role architecture may play in the process of cultural resistance and regeneration, particularly for indigenous peoples. There, I discovered the emergence of a new generation of contemporary Tibetan builders. They were architects or civil engineers who were born in exile and received their education in India. And these young professionals held the burden of upholding their construction tradition in the face of the collapse of traditional building techniques and the destruction of the great majority of ancient sites in Tibet [2].

However, as was to be expected, their academic degree had not equipped them to take on this issue. They had, at most, a cursory understanding of their region's architectural history and had never set foot inside a true traditional structure. This led to a frustrating situation that may also be hazardous, since any effort to practise Tibetan architecture without having a thorough knowledge of its core and the unique challenges it faces would be harmful. Finding deeper meaning would be a dangerous endeavour that would hasten its demise. a sentimental approach that rejects changing environmental circumstances and restricts itself to the rigorous replication of past models The tradition would become rigid and nonadaptive with the emergence of suitable materials and technology. Improper and improper use of forms and symbols, which turns distinguishing features into simple cosmetic clichés, might ultimately reduce Tibetan architecture to a parody of itself. At the same time, it seemed to be very difficult to successfully pick up the halted tradition. The material was spread out and difficult to find. The necessary knowledge was primarily held in the minds of the craftsmen and master builders who were now dispersed, who had been unable to practise their trade for many years, and who were ageing without passing on their skills. This unwritten tradition was passed down by example from generation to generation. Other instances beyond Tibet were found in isolated regions of the Himalayas, and the primary educational resources, as well as the monuments themselves or whatever was left of them remain off-limits in the motherland [3].

In light of this, I was requested to work as an architect and contribute to the design of structures for the community by the Tibetan exile government, which is situated in northern India. Instead, in an attempt to ensure the growth and continuation of their construction heritage, I suggested a programme that would provide young Tibetans access to it once again after extensive talks with community members. As a result, at the beginning of 1991, the Initiative for the Preservation, Development, and Promotion of Tibetan Architecture and Construction Practises was established. The project's initial goal was to gather all information pertinent to the built heritage and then utilise that knowledge to pique interest in it, particularly among young people. A more general goal was to foster the development of a social environment that would allow a new generation of Tibetans who were straddling tradition and modernity to begin to reconstruct the memory of their cultural heritage and make innovative use of this recovered legacy as they redefined their identities and built their futures [4].

DISCUSSION

A symbolic gesture, like a pilgrimage, was used to kick off the project. Its purpose was to enable two young Tibetans, an apprentice architect and a civil engineer, to travel to Jigme Taring over the course of two days. Before being forced to leave Tibet in 1959, Mr. Taring served as a government official and was known as the "last architect" of Lhasa. When the current Dalai

Lama was a teenager, he had created his vacation home. He made a sketch map of Lhasa that included all significant monuments and features not long after his arrival in India. Later in life, after stepping down from his position as the head of a school for refugees, he began working on an old project: creating a precise layout of the Jokhang, the oldest and most important temple in Tibet, which dates back to the seventh century. He felt a pressing desire to save the temple's legacy for future generations because he feared it might be destroyed. He made the maps from memory since he was familiar with the shrine. Then, he constructed a scale replica of it that was on display in every Tibetan hamlet. The elderly guy represented the construction tradition's survival in exile to the young Tibetan builders. It was a significant meeting. Although there are a number of Western researchers and students of Tibetan architecture. This was the first time young Tibetans had flocked to Taring to seek his wisdom despite having previously met and interviewed him. He spoke to them for many hours despite being unwell. He explained to them how he had learnt to design plans and sections as a young man by studying historical monuments and having lengthy talks with traditional master builders. Later, he had learned how to do this from British army officials. He shared tales, pulled out antique pictures and drawings, and sketched the architecture of ancient Tibet. Taring was excited when we informed him about the project and our intentions to explore the border areas of Tibet's architectural heritage. He responded, "Yes, go and see the monuments everywhere you can. Open your eyes and ears and do drawings, take pictures, ask inquiries, and study the ancient stones. One may discover priceless wisdom, little nuggets of understanding here and there, even among ruins. But don't give up; keep in mind that even little droplets may create an enormous ocean. To capture his recollections, plans were formed for a subsequent visit. It was not to be; two months later, Jigme Taring passed away [5].

Documentation Center

Our initial intention for the project was to develop a container where all the retrieved "drops of knowledge" could be gathered, a location where the dispersed pieces of memory could be put together to form a massive jigsaw puzzle in order to piece together the past. A specialised documentation center for the preservation and promotion of Tibetan architecture was formed with this objective in mind. In order to make images, drawings, testimony, historical writings, and research materials accessible to the general public, particularly the younger generation, it included an archives section and a small themed library. The picture collection, for which more than 2,500 images of historical architecture were first obtained, served as the centrepiece of the archives. The majority were copies of private Tibetans could now visit collections, museums, and colonial institutions that had previously been off-limits to them in Europe. The images depict Tibet in its pre-destruction state. Many are one-of-a-kind recordings of famous structures, temples, cities, and villages that are no longer there.

Particularly avid consumers of the picture repository, adolescents would subsequently assist in its growth. The young people were able to print and enlarge the images that had been brought to India, most of which were in the form of negatives or contact sheets, in the darkroom that we created. Each time a picture was gradually disclosed throughout this procedure, they were more fascinated, as if a magical window had suddenly opened, revealing priceless details of their stolen history. The young Tibetans understood that their forefathers had created a rich architectural legacy that was harmonious with and well suited to a challenging environment [6], [7].

They were introduced to a world full of remarkable buildings, engineering marvels where countless massive fortresses were placed strategically atop inaccessible summits and enormous monasteries resembled small towns in their size and complexity, occasionally housing up to ten thousand monks. Additionally, they discovered how the influence of their built heritage extended far beyond monasteries and towns and practically covered the entire landscape due to the use of buildings that marked historical occurrences, established boundaries, and organised the ritual use of space, acting as centres of worship or as stops on pilgrimage routes. Young Tibetans also discovered that there were several lessons to be gained from the ancient tradition, which provided helpful answers to the problems facing today. For instance, monasteries that at some point in time had to accommodate thousands of monks on a small amount of land due to a sudden increase in population had developed sophisticated high-density housing that in many ways resembled housing developed in the West in recent decades.

Young Tibetans were ecstatic about the points of convergence between their own culture and the prominent and highly recognised contemporary architecture, and they were surprised by the "modern" aspect of these solutions. A slide collection of hundreds of current and contemporary photos illustrating the development of Tibetan architecture was shown alongside the historical photographs. This collection was a crucial resource for doing comparative research, recreating the histories of monuments or communities, and tracking historical changes like the degree of damage and varying phases of restoration. The picture collections included the architectural styles of the many Tibetan regions as well as those of other nations that fell under the cultural influence of Tibet, from the ancient Buddhist kingdoms along the Himalayas to Mongolia and south central Siberia. The information spread the idea that the Tibetan construction tradition is adaptable and has always been able to accommodate many cultural and ecological contexts [8].

Fieldwork

All the knowledge gleaned through images, books, and interviews for any serious student of architecture may at best be secondary sources of information, helpful when the original buildings don't exist or are unavailable. The tactile sense of touching and moving through and around a structure cannot be replaced. As a result, in August and September 1993, we went on our first field trip to the Ladakh architectural landmarks. Ladakh is a region that was formerly part of Tibet but is now in India. First, we went to a number of monasteries and age-old settlements in the Indus Valley. The participants have never really seen actual examples of their cultural heritage's architecture before. After that, we continued on to the monastery of Samkar, where we remained for four weeks to measure and record its structures. It was the team's first effort to completely record a historical site. The monastery complex was thoroughly and meticulously surveyed, and precise drawings were created.

Photographs, drawings, and interviews with the local monks were among the other forms of documentation. The prolonged stay at Samkar provided a chance to comprehend the layout and operation of the monastery in more detail, as well as the connections between architectural space and the rhythms of monastic life and religious ritual. This surveying exercise resulted in the acquisition of practical skills and methodological competence, and the documentation created was a priceless record of a historical site that would aid in its preservation. The excursion to Ladakh also demonstrated how such an event may serve as the framework for a distinctive and all-encompassing learning experience, in addition to these anticipated advantages. The excursion

was a great chance for young Tibetans since Ladakh is likely the nearest place to experience historic Tibet [8].

To encounter a traditional way of life that is similar to their own but hasn't gone through the devastating experience of quick, dramatic change. Along with the practical information they learned from studying the monuments, they encountered problems that were important to their growth as both traditional and contemporary designers and builders. They could see, for instance, how isolated communities were undergoing the first influences of modernity, with the degree of change typically based on how far away they were from the main road, or how monasteries were adapting differently to the new architectural challenges brought on primarily by the sudden increase in tourism, as the sudden income was frequently reinvested in preservation or renovation work, as well as the conversion of old structures or the addition of new ones. On this excursion, a number of unexpected meetings occurred. We had multiple encounters with teams of Western architects researching or photographing monasteries, as well as conservationists seeking to save murals and endangered structures.

The visitors' admiration for Tibetan architecture and dedication to its preservation shocked our young team members. This served as a motivator and confidence booster for them. Additionally, there were some positive interactions. We spent a few days in the monastery of Ridzong working with a team of University of Berlin scholars who were conducting an extensive study of the spiritual complex. It was an intriguing and mutually beneficial interchange in which the Germans' precise surveying techniques could teach the Tibetans something, and the Tibetans' acquaintance with the religious and cultural context could teach the Germans something. Out of this interaction, a spirit of cooperation developed, and for our team, an essential realisation emerged: Tibetans not only have a lot to learn from others, but also a lot to contribute [9].

Architecture Club

The material produced by the survey of the Samkar monastery in Ladakh was utilised to further the project's second key goal, which was to pique students' interest in Tibetan architecture. The Tibetan Children Village School held a slide show and talk on architectural legacy in addition to an exhibition of the drawings, photos, and sketches. Students between the ages of fifteen and eighteen were asked to participate in the initiative. All of a sudden, a large number of them aspired to be architects. Only eleven extremely driven boys and girls could join the architectural club due to our limited facilities and resources. The student organisation, which went by the name Nyampa Larso, , engaged in a number of events over the next months, most of which were planned for weekends and holidays to avoid interfering with their academic obligations. The students were taught the fundamentals of visual communication and the language of architectural design, enabling them to interpret plans and sections and write down their own thoughts. They gained knowledge about how to use cameras and cameras. They used what they had learned to record neighbourhood buildings.

Additionally, they visited Ladakh on a field study and examined a monastery, resulting in drawings that they eventually displayed at several towns' schools They spoke with and documented the knowledge of traditional and contemporary artists. They learnt about architectural religious meaning and the historical context of various monuments from monks and Buddhist experts. Additionally, the students had access to periodicals that covered a range of construction-related topics, from the preservation of ancient monuments to the most recent trends in contemporary design. Additionally, they were exposed to knowledge on ecology, proper

construction techniques, and how other traditional communities were battling to build homes that reflected their cultural values and requirements. The group actively participated in the growth of the documentation centre and took on more and more duties. The students organised and catalogued archive materials in addition to learning how to print and develop film in a darkroom. Additionally, they located prospective sources of information, particularly among the elderly in the neighborhood, collecting their testimonies and sometimes converting their descriptions into drawings of the recalled structure or settlement [10], [11].

CONCLUSION

The dynamic interaction between tradition and innovation has been a defining feature of the Tibetan diaspora. Traditional Tibetan ways of life and cultural history must be preserved if cultural identity and adaptability are to be maintained, but innovation and adaptation are now essential if the diaspora community is to survive and stay relevant in a changing world. The Tibetan diaspora has experienced a variety of difficulties, such as being uprooted from their own country and being under pressure to assimilate in host nations. Tibetan communities have, nonetheless, shown incredible tenacity and inventiveness in defending and advancing their traditions. Spaces for the transfer of Tibetan language, arts, and traditions have been made possible through cultural organisations, community centres, and educational institutions. These programmes have contributed to fostering a feeling of pride and affiliation among Tibetans living abroad, especially among younger generations. The Tibetan diaspora groups' adaptation strategy has allowed for the blending of host cultural influences while preserving the fundamental principles and substance of Tibetan traditions.

This adaptability has made it possible for Tibetan cultural practises to remain relevant and accessible in a range of cultural situations. Additionally, the use of technology and digital platforms has aided in the preservation of Tibetan cultural history beyond geographical borders as well as the sharing of information and connections across diaspora populations. In the Tibetan diaspora, tradition and innovation are not competing forces but rather two complementing facets of cultural resilience. While innovation and adaptation make sure the traditions stay relevant and responsive to the changing requirements of the diaspora community, tradition preservation offers a solid basis for sustaining cultural identity and continuity. The interaction of tradition and innovation among Tibetan diaspora groups promotes a feeling of cultural vitality and flexibility. Additionally, tradition and creativity in the Tibetan diaspora extend to other facets of Tibetan society, such as the social, economic, and political arenas, and are not only restricted to the preservation of cultural practises. Through overcoming the difficulties of exile and creating networks of support and solidarity, the diaspora community has shown its resiliency and resourcefulness.

In addition to being important for the Tibetan community, the promotion and preservation of Tibetan traditions in the context of the diaspora also helps people understand and appreciate the rich variety of cultures throughout the world. The many communities in which the Tibetan diaspora lives are enriched by their rich cultural traditions and history. In the Tibetan diaspora, innovation and tradition coexist as maintaining traditions and adjusting to new cultural situations go hand in hand. The Tibetan diaspora has shown how crucial it is to preserve cultural identity and tradition while welcoming change and innovation. The continued efforts of the Tibetan diaspora to protect and advance their traditions are both an inspiration and a sign of the community's tenacity and fortitude.

REFERENCES

[1] J. Whalen-Bridge, "Multiple modernities and the Tibetan diaspora," South Asian Diaspora, 2011, doi: 10.1080/19438192.2010.539039.

[2] E. Noriega, "Tradition and innovation in the Tibetan diaspora," in Managing change: sustainable approaches to the conservation of the built environment: 4th Annual US/ICOMOS International Symposium organized by US/ICOMOS, Program in Historic Preservation of the University of Pennsylvania, and the Getty Conservation Insti, 2003.

[3] Joseph S. Alter, "The Journal of Asian Studies," J. Asian Stud., 2017, doi: 10.1017/s0021911806001537.

[4] Kenneth M. George, "JAS volume 65 issue 4 Cover and Front matter," J. Asian Stud., 2006, doi: 10.1017/s0021911806001525.

[5] D. L. Burge et al., Yoga and Kabbalah as World Religions? A Comparative Perspective on Globalization of Religious Resources. 2014.

[6] H. Benny, "When traditions become innovations and innovations become traditions in everyday food pedagogies," Aust. J. Adult Learn., 2012.

[7] N. Simbirtseva, "Visualization and Digitalization: Between Tradition and Innovation in Modern Education," KnE Soc. Sci., 2020, doi: 10.18502/kss.v4i13.7691.

[8] A. Presenza, A. Messeni Petruzzelli, and L. Sheehan, "Innovation trough tradition in hospitality. The Italian case of Albergo Diffuso," Tour. Manag., 2019, doi: 10.1016/j.tourman.2018.11.020.

[9] D. Herman, "Paul Ricoeur: Tradition and Innovation in Rhetorical Theory," SubStance, 2007, doi: 10.1353/sub.2007.0044.

[10] T. Parkinson, "Mastery, enjoyment, tradition and innovation: A reflective practice model for instrumental and vocal teachers," Int. J. Music Educ., 2016, doi: 10.1177/0255761414563196.

[11] S. Yakushenkov, "Inversive ambivalence: Traditions and innovations in the frontier societies," Istoriya, 2020, doi: 10.18254/S207987840012285-2.

CHAPTER 24

AGRICULTURAL LANDSCAPES AS WORLD HERITAGE

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ABSTRACT:

Throughout human history, agricultural landscapes have been essential in forming civilizations and providing a living. Through the reflection of cultural practises, knowledge systems, and the sustainable use of land and resources, they demonstrate the close connection between people and environment. Agricultural landscapes are being more often nominated for World Heritage status in recognition of their importance, underlining their exceptional universal worth and the need of their preservation. This abstract discusses the significance of agricultural landscapes in terms of cultural, ecological, and social sustainability. It also gives a general introduction of the idea of agricultural landscapes as World Heritage. Agricultural landscapes and their distinctive features shall be introduced in the first paragraphs of the abstract. It will showcase the many farming methods used across the globe, from conventional farming systems to contemporary agro-industrial complexes. The versatility of agricultural landscapes will be highlighted since they not only provide food and fibre but also support biodiversity preservation, water management, and cultural identity. The importance of listing agricultural landscapes as World Heritage sites will next be covered in the abstract. It will examine how such designation might support cultural diversity, preserve traditional knowledge, and encourage awareness of the value of sustainable agriculture. Additionally, the abstract will discuss the various difficulties and conflicts that may occur when managing agricultural landscapes within the parameters of World Heritage, including balancing conservation with agricultural production and tackling the effects of climate change and globalization.

KEYWORDS:

Agricultural, Cultural, Heritages, Landscape, Sites.

INTRODUCTION

Throughout history, agricultural landscapes have been crucial in forming human civilizations. They represent the cultural, social, and ecological relationships between people and the environment in addition to providing food and a means of subsistence. The idea of listing certain agricultural landscapes as World Heritage sites has gained popularity recently due to the realisation of their great importance. An overview of the significance of agricultural landscapes as a World Heritage site, the justifications for their designation, and the relevance of their preservation will be given in this introduction. The notion of agricultural landscapes and its inherent complexity will be introduced first in the introduction. It will highlight the variety of traditional, native, and contemporary agricultural practises that may be found around the world. It will emphasise how elements like temperature, geography, soil properties, and the customs and knowledge of local groups affect these landscapes. The justification for listing agricultural

landscapes as World Heritage sites will then be covered in the introduction. It will go through how agricultural landscapes display the complex interplay between culture, nature, and sustainable development by illuminating the concrete and intangible history of human relationships with the land.

The focus of the introduction will be on how the designation of agricultural landscapes as World Heritage encourages their preservation and sustainable management and helps increase public awareness of their significance. The introduction will also cover the advantages and difficulties of listing agricultural landscapes as a World Heritage site. It will go into how such recognition may help keep up customary agriculture methods, protect cultural variety, and promote neighborhood growth. The possible conflicts that might develop from managing agricultural landscapes within the parameters of the World Heritage designation will also be discussed, including the need of striking a balance between conservation objectives and agricultural production and taking into account the effects of modernisation, urbanisation, and globalisation. The introduction will also emphasise the significance of global organisations like UNESCO (United Nations Educational, Scientific and Cultural Organisation) in the designation and preservation of agricultural landscapes as World Heritage sites. It will identify pertinent treaties and programmes, such the World Heritage Convention and the Globally Important Agricultural Heritage Systems (GIAHS) programme, that support the preservation and sustainable management of agricultural landscapes [1], [2].

The introduction will also describe the purpose and format of the next parts of the paper. The case studies and examples that will be looked at to show the variety of agricultural landscapes and their potential as World Heritage Sites will be mentioned. The significance of multidisciplinary methods and stakeholder participation in managing and maintaining agricultural landscapes as World Heritage will also be discussed. An extensive review of the importance of agricultural landscapes as World Heritage is given in the introduction. It demonstrates the richness and variety of agricultural landscapes, emphasises their significance to culture and the environment, and justifies their inclusion on the World Heritage List. The introduction lays the groundwork for future investigation of the subject, which will include case studies and discussions of the advantages, difficulties, and management techniques connected to the designation of agricultural landscapes as World Heritage [3], [4].

DISCUSSION

I am worried about the low importance that national and international organisations tasked with promoting, safeguarding, and administering cultural assets in the developing countries put on cultural landscapes since I am an archaeologist who studies both historical and contemporary agricultural landscapes. My study in Bolivia and Peru focuses on an understudied category of cultural landscapes: the unremarkable, conventional agricultural landscape. Governments, international development organisations, conservation organisations, financing organisations, and my colleagues in archaeology are difficult to persuade that this category of cultural assets is significant and deserving of attention. The inherent nature of agricultural landscapes prevents them from obtaining attention and preservation, in contrast to cultural landscapes including enduring monuments, significant structures, ancient locations, and holy natural aspects. Most traditional agricultural landscapes are cultural.

In the Andean area of South America, there are several formally structured and highly patterned agricultural landscapes that are extensively cultivated. These landscapes are what I refer to as

anthropogenic and classify as a kind of constructed environment. These created environments rival any historically notable monument or structure in terms of intricacy and design. Most are really engineered, with landscape capital and the accumulated infrastructure of fields, fences, walkways, roads, canals, and other land improvements, about which information is handed down from parents to children over many generations. Numerous traditional agricultural landscapes have been successfully cultivated for thousands of years and house sizable rural populations.

Individual rural farming communities' built environment or "landscape capital" is often more impressive than the creations of centralised nonindustrial nations. Volumetric estimations of the building fill for terrace platforms and the lengths of facing walls are provided by computer modelling of the cultivated landscapes of individual ethnographic and archaeological groups in the Lake Titicaca region of Peru and Bolivia. The amount of earth that is transported and the linear barriers that are built within a single community's spatial footprint surpass those of monumental monuments. According to these research, single agricultural groups use up to 200 times more energy to move the ground than is used to create individual monuments at ceremonial and administrative locations.

The "cultural capital" or "social capital" of a landscape also exists. Agricultural terrain is the result of Many generations of farmers have worked on what are sometimes thought of as marginal fields using their indigenous knowledge and skills. In the physical patterning and palimpsest of landscape features (field morphology, house compounds, walls, networks of paths and roads, field boundary markers, and rural shrines), the lifeways of present and past peoples are embedded. These include their settlements, technology, land tenure, social organisation, and worldview. Archaeologists get knowledge about "the people without history," or those who are neglected by conventional archaeological study and historical interpretation, via the reading of landscapes (Wolf 1982). It is about populating both the historical and contemporary landscapes that is the focus of landscape archaeology [5], [6].

What do "relict," "continuing," or "lived in" agricultural landscapes really mean economically and culturally? According to my argument (see Fairclough, Siravo, Noriega, and Haney in this book), agricultural landscapes provide important concrete and intangible benefits for local residents, the nonlocal public, national governments, and the global community. However, value is useless without supporters. Compared to other types of cultural landscapes, there are less people who support agricultural landscapes in the global heritage and cultural resource management fields. Traditional archaeology, which ought to be the main defender of traditional agricultural landscapes, is regrettably still steadfastly dedicated to the "site concept" (Dunnell 1992; Fotiadis 1992). Archaeologists locate, dig, examine, interpret, and safeguard sites, which are often sizable urban centres with important stone and brick structures and monuments. Landscape, which is sometimes confused with environment, is only thought of as the backdrop or setting for sites and monuments. Surprisingly, local travel agents engaged in eco- and cultural tourism, native peoples and local residents, private landowners, and cultural geographers (of the Berkeley school founded by Carl Sauer, e.g., Denevan 2001; Zimmerer 1996) who are interested in indigenous knowledge systems are the most vocal supporters of agricultural landscapes.

The Problem of Traditional Definitions of Cultural Landscape

Cultural landscapes became a part of UNESCO's Operational Guidelines for the Implementation of the World Heritage Convention in 1992. Although this is a step in the right direction, the register still heavily favors monuments, collections of buildings, and sites. In 1998, UNESCO

listed 522 locations as World Heritage Sites, of which 418 were cultural, 114 were natural, and 20 were combined cultural and natural sites Only 14 of them are cultural landscapes, and the majority of those were previously recorded rather than for their intrinsic worth because of their proximity to significant structures, monuments, or natural elements . Agriculture-related landscapes continue to be the least well-represented World Heritage category.

In line with UNESCO, The "combined works of nature and of man" mentioned in Paper 1 of the Convention are represented through cultural landscapes. They demonstrate how human culture and settlement have changed through time, influenced by the natural environment's physical limitations and/or possibilities, as well as succeeding external and internal social, economic, and cultural factors. They should be chosen for both their exceptional universal significance and their representativity [sic] within a precisely defined geo-cultural zone, as well as for their ability to highlight the key cultural characteristics of such locations. The phrase "cultural landscape" encompasses a variety of expressions of the connection between people and its natural environment, according to the Operational Guidelines. According to the text, there are three primary types of cultural landscapes:

1. The highly defined environment that has been purposefully built and constructed by man is the easiest to recognise. This includes landscaped gardens and parks created for aesthetic purposes that are often (but not always) related to religious or other monumental structures and ensembles.
2. The second type is the landscape that has developed naturally.

This is the product of an original social, economic, governmental, or religious imperative and has taken on its current shape via interaction with and adaptation to its natural surroundings. Such landscapes exhibit the shape and defining characteristics of that evolutionary process. They may be divided into two groups: a relict (or fossil) landscape is one where an evolutionary process ended at some point in the past, either suddenly or through time. a continuous landscape is one that keeps an active social function in current society strongly related with the old way of life and in which the evolutionary process is still in operation. Its key differentiating characteristics, however, are still discernible in tangible form. It also displays substantial physical evidence of its historical development.

3- The related cultural landscape is the last category. Instead of tangible cultural evidence, which may be negligible or nonexistent, the inclusion of such landscapes on the World Heritage List is justified by the strong religious, aesthetic, or cultural connections of the natural element. The categories and criteria of cultural landscapes are infused with the site notion. I think the distinctiveness of cultural landscapes is difficult to include by the dominant site idea epistemology in archaeology and World Heritage management. "Associative landscapes" classified as World Heritage are characterised by proximity to a holy natural feature (i.e., a location) acknowledged as having religious significance. not the actual landscape. Landscapes, according to Church "are not just huge expanses, nor are they aggregation of sites as most regional Archaeological research is organised. The Andean region's traditional agricultural landscapes, which are classified as cultural landscapes, seem to be overlooked by the most recent criteria offered by UNESCO. Despite not being specified directly, agricultural landscapes would be regarded as "organically evolved landscapes [7], [8].

This category, according to UNESCO is the result of "an initial social, economic, administrative, and/or religious imperative" that develops naturally "by association with and in

response to its natural environment." The sentence appears to indicate two things: (1) top-down demands were placed on people living on the land, and (2) the landscape evolved via a process of cultural and natural interaction. The inadvertent outcome or by-product of human occupancy and usage of the land over a long period of time is credited with the construction of the landscape. As a result, this formulation does not leave much opportunity for human action, judgement, or historical contingency. The abandoned archaeological terraces and elevated fields in the Andes would be categorised by UNESCO as relict landscapes, whereas the terraced fields that are still being farmed would be categorised as ongoing landscape. In this case study, I contend that there is no real difference between "continuing" and "relict" cultural landscapes since they all exist now and are a part of the vibrant, populated modern world.

The terms "clearly defined landscape" and "associative cultural landscape" are contrasted with the category of "organically evolved landscape." Formal gardens and parks are explicitly included in well defined landscapes. Gardens and parks are often compared to vernacular, unorganised, cultivated landscapes or rural countryside because they represent formal design, monumentality, and elite aesthetics as ideal forms of the Western cultural landscape. The distinct landscape once again shows how the site idea has an impact on how UNESCO defines cultural landscape. These landscapes should be treasured because they include traditional structures, monuments, or sites because they "are frequently (but not always) associated with religious or other monumental buildings and ensembles." Why can't cultural landscapes be admired for what they are?

Cultural landscapes are associated with nature according to UNESCO, which describes them as "manifestations of the interaction between humankind and its natural environment." Agricultural landscapes are considerably more than just the result of a civilization and environment interacting. The artificial division between natural and cultural landscapes is solidified by UNESCO's classifications. The widespread misconception of the pristine environment and the idea of wilderness as a result continue to influence World Heritage policies. Recent edited books that advocate designating cultural landscapes as World Heritage reinforce the idea that human activity is detrimental to the environment. The crucial New Ecology concepts that emphasise the need of chaos, disturbance, patchwork, and change for environmental health are ignored in this literature. Historical ecologists have noted that no American landscape is wild or unspoiled. To some extent, every landscape has human influences.

The native agroforestry, farming, herding, burning, and other cultural practises that have shaped the land's recognition as natural or wilderness are a result of thousands of years of human habitation. The most common landform on earth today is a landscape that has been somewhat "domesticated" by farmers or hunter-gatherers in the past and present. The third form of cultural landscape, "associative cultural landscape," is where the relationship with nature is most obvious. Significantity in this context is associated with "powerful religious, artistic, or cultural associations with the natural element rather than material cultural evidence" see also Carmichael et al. 1994). Protecting prominent natural features and the immediate viewshed surrounding them is the category's obvious goal. The natural background or environment for a location or site replaces the related cultural landscape. Bradley (2000) makes the observation that landscapes with naturally occurring sacred locations are "marked" by subtly archaic characteristics and practises (shrines, alignments, orientations, and caches of offerings) that in and of themselves are significant cultural assets.

Andean landscapes are much more than just a result of how people and environment coexist. Their importance stands apart from conventional monumental architecture, structures, or locations. These once agricultural landscapes have undergone so extensive human alteration that they are now entirely developed environments. Andean agricultural landscapes are highly patterned and purposefully created in accordance with utilitarian, aesthetic, and cosmological principles, as demonstrated by this case study; as a result, they should be categorised as "clearly defined landscapes" (even though they may not necessarily be "clearly defined" in terms of cultural or physical boundaries).

Cultural landscapes are not currently protected in Latin America as a separate category of cultural heritage, but rather in conjunction with prominent "natural" or "pristine" environments with high biodiversity (examples include the Rio Abiseo National Park and the Machu Picchu Archaeological National Park, which are both designated as World Heritage "mixed natural and cultural sites"). In emerging nations, the management of cultural and natural resources continues to be dominated by the idea of wildness. The "coattailing" or "piggybacking" of agricultural landscape protection to national parks, nature reserves, indigenous territories, traditional sites, and monuments is one strategy used in emerging Latin American nations where the idea of cultural landscape is underdeveloped. The issue is that green politics and environmentalism, which prioritise the conservation of virgin nature or wilderness, are at tension with the anthropogenic qualities of conventional agricultural landscapes. Many traditional agricultural landscapes, in my opinion, are significant enough to be included as World Heritage Sites [9], [10].

CONCLUSION

For the long-term progress and protection of humanity's cultural legacy, agricultural landscapes must be designated as World legacy Sites. Agricultural landscapes are complex systems that represent millennia of human knowledge, cultural practises, and ecological interactions rather than just being places where food is produced. These landscapes' remarkable global importance is recognised by their designation as World legacy sites, which also protects their extensive natural and cultural legacy for next generations. There are several important advantages to keeping agricultural landscapes as World Heritage sites. First of all, it promotes awareness of sustainable agriculture's significance and the crucial part it plays in guaranteeing food security, biodiversity preservation, and cultural variety. Local communities are motivated to protect their ancestors' knowledge, customs, and agricultural techniques as a result of agricultural landscapes being designated as World Heritage sites. Second, the inclusion of agricultural landscapes on the World Heritage List helps to promote cultural variety and international understanding. The intricate relationships between communities, their cultural identities, and the land they live on are reflected in these landscapes. The designation of agricultural landscapes as World Heritage promotes the preservation and restoration of traditional farming methods, customs, festivals, and agricultural skills, promoting cultural resilience and sustainable livelihoods. Thirdly, maintaining agricultural landscapes as World Heritage Sites promotes biodiversity preservation and ecological sustainability. A high degree of biodiversity, including uncommon and unique plant and animal species, is a common feature of agricultural settings. The conservation of ecosystems, ecological balance, and the supply of ecosystem services like pollination, water management, and soil fertility are all ensured by protecting these landscapes.

However, there are difficulties in maintaining agricultural landscapes as World Heritage sites. It is a tough undertaking to strike a balance between the preservation of beautiful landscapes and agricultural production, industrialization, and urbanisation. To create sustainable management plans that include cultural, ecological, and economic factors, it is necessary to involve local communities, farmers, policymakers, and other stakeholders in the decision-making process. In addition, understanding how globalisation, land degradation, and climate change affect agricultural landscapes is essential for ensuring their long-term protection as World Heritage sites. To preserve the resilience and sustainability of these landscapes in the face of changing environmental and socioeconomic challenges, innovative and adaptable solutions that integrate traditional knowledge with contemporary technology are required. A crucial step in preserving agricultural landscapes, fostering sustainable agriculture, preserving cultural variety, and guaranteeing the intergenerational transfer of traditional knowledge and practises is the designation of agricultural landscapes as World Heritage sites. In addition to inspiring collaborative efforts to protect and sustainably manage these important landscapes for the benefit of current and future generations, the designation of these landscapes as World Heritage signifies the world's recognition of their exceptional significance.

REFERENCES

[1] M. Vallejo, M. I. Ramírez, A. Reyes-González, J. G. López-Sánchez, and A. Casas, “Agroforestry systems of the tehuacan-cuicatlan valley: Land use for biocultural diversity conservation,” Land, 2019, doi: 10.3390/LAND8020024.

[2] A. Santoro et al., “Agroforestry heritage systems as agrobiodiversity hotspots. The case of the Mountain Oases of Tunisia,” Sustain., 2020, doi: 10.3390/SU12104054.

[3] G. Tucci et al., “Multi-sensor UAV application for thermal analysis on a dry-stone terraced vineyard in rural Tuscany landscape,” ISPRS Int. J. Geo-Information, 2019, doi: 10.3390/ijgi8020087.

[4] X. Gao, G. Roder, Y. Jiao, Y. Ding, Z. Liu, and P. Tarolli, “Farmers’ landslide risk perceptions and willingness for restoration and conservation of world heritage site of Honghe Hani Rice Terraces, China,” Landslides, 2020, doi: 10.1007/s10346-020-01389-4.

[5] A. Lomba et al., “Back to the future: rethinking socioecological systems underlying high nature value farmlands,” Front. Ecol. Environ., 2020, doi: 10.1002/fee.2116.

[6] J. Ananayo and H. Richins, “Preserving the Ifugao Rice Terraces,” Tour. Cases, 2020, doi: 10.1079/tourism.2020.0017.

[7] Y. Sun, M. Jansen-Verbeke, Q. Min, and S. Cheng, “Tourism potential of agricultural heritage systems,” Tour. Geogr., 2011, doi: 10.1080/14616688.2010.516400.

[8] P. Tarolli, F. Preti, and N. Romano, “Terraced landscapes: From an old best practice to a potential hazard for soil degradation due to land abandonment,” Anthropocene. 2014. doi: 10.1016/j.ancene.2014.03.002.

[9] F. D. Ekarini, “The Landscape of Borobudur Temple Compounds and its Environment,” J. World Herit. Stud., 2017.

[10] M. Agnoletti, M. Tredici, and A. Santoro, "Biocultural diversity and landscape patterns in three historical rural areas of Morocco, Cuba and Italy," Biodivers. Conserv., 2015, doi: 10.1007/s10531-015-1013-6.

CHAPTER 25

INTANGIBLE CULTURAL VALUE OF TRADITIONAL AGRICULTURAL LANDSCAPES

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ABSTRACT:

Traditional agricultural landscapes are notable for their intangible cultural value in addition to their physical characteristics and ecological roles. The intangible cultural elements connected to traditional agricultural landscapes are explored in this abstract, with a focus on their significance for heritage preservation, community identity, and sustainable development. The abstract opens with a definition of traditional agricultural landscapes and a discussion of their distinctive features. It illustrates how enduring agricultural practises, indigenous knowledge systems, and generational cultural traditions have formed these landscapes. It places a focus on the interdependence of people, the environment, and cultural practises in preserving the health and sustainability of these landscapes. The abstract then explores the traditional agricultural landscapes' intangible cultural worth. It examines the many aspects of this value, including customs, holidays, oral traditions, social customs, and interpersonal interactions. It draws attention to the linkages between these intangible elements and agricultural practises, reflecting the long-standing relationships between people and their environment.

KEYWORDS:

Agriculture, Intangible, Landspace, Preservation. Sustainable.

INTRODUCTION

The physical and ecological importance of traditional agricultural landscapes is complemented by their rich intangible cultural history. These landscapes reflect millennia of farming methods, regional knowledge systems, and cultural practises, resulting in a special interaction between people, the environment, and cultural manifestations. An overview of the intangible cultural value connected to traditional agricultural landscapes will be given in this introduction, with an emphasis on the importance of their preservation for heritage preservation, community identity, and sustainable development. The introduction will start by outlining the definition of traditional agricultural landscapes and some of its most important traits. It will describe how agricultural practises including crop cultivation, animal husbandry, and land management methods that have been handed down through centuries have altered these landscapes. The innate connections between these customs, cultural traditions, and the sustainable use of natural resources will be emphasised.

The discussion of intangible cultural heritage and how it relates to traditional agricultural landscapes will follow the introduction. The many components of intangible cultural value, such as oral traditions, rituals, festivals, traditional knowledge systems, social practises, and

interpersonal interactions, will be examined. It will highlight the intimate relationship between these intangible characteristics and agricultural practises, which reflects the cultural identity, values, and beliefs of the people who live in and work these landscapes. The importance of appreciating and preserving the intangible cultural worth of traditional agricultural landscapes will also be covered in the introduction. It will demonstrate how safeguarding intangible cultural assets helps communities maintain their identities, improves social links, and gives them a feeling of pride and belonging. Additionally, it will look at how intangible cultural assets may be used to generate cultural tourism, open doors for employment, and encourage rural communities to grow sustainably. In addition, the introduction will include examples and case studies from many parts of the globe to show the various ways in which traditional agricultural landscapes have intangible cultural value. The numerous cultural customs, rites, storytelling customs, and knowledge systems that add to the intangible legacy of different landscapes will be highlighted in these case studies. They will emphasise how cultural practises are passed down through generations and how crucial community involvement is to maintaining and reviving these traditions. The introduction will also describe how the next parts of the paper will be organised and what they will cover. In order to recognise and preserve the intangible cultural worth of traditional agricultural landscapes, it will be important to use multidisciplinary methods and to include local people, scholars, policymakers, and heritage organisations. It will stress the need of inclusive and participatory heritage conservation strategies that respect the rights and aspirations of the communities serving as the intangible heritage's guardians [1], [2].

An overview of the intangible cultural value connected to traditional agricultural landscapes is given in the introduction. It demonstrates the interdependence between agricultural methods, cultural customs, and intangible cultural assets. The importance of appreciating and preserving these landscapes' intangible cultural worth in terms of heritage preservation, community identity, and sustainable development is highlighted in the introduction. It prepares the ground for deeper investigation of case studies, research results, and conversations on the many types of intangible cultural value present in traditional agricultural landscapes.

DISCUSSION

Do elevated fields serve any purpose other than to be employed in modern society? Is it necessary for modern farmers to embrace and practise raised field agriculture in order for it to be deemed to have "outstanding universal value" and merit preservation as a World Heritage site? These agricultural landscapes might be useful for various reasons despite the fact that present "living" usage would increase their chances of survival. A cultural landscape must be of "outstanding universal value" in order to be nominated for World Heritage preservation by UNESCO. This idea is troublesome in theory and in practise, as Cleere notes. The likelihood that cultural landscapes will fulfil the requirements of exceptional universal significance and be considered for nomination is lower than that of traditional sites and monuments. According to Cleere (1995:229), judgements are often made based on "an aesthetic and historical perspective that is grounded in European culture." He claims that appreciation of cultural property is neither universal nor uniform. In response to Cleere's criticism, Titchen (1996) points out that the phrase "outstanding universal value" is intentionally nebulous and constantly being developed.

When looking out over the rural Andes, government planners, employees of development organisations, and visitors perceive nothing but unending, grinding poverty, squalor, and illiteracy. Anthropologists, archaeologists, and geographers see a peaceful, stunning countryside

populated by content peasants who use advanced technology and a wealth of indigenous knowledge. Are raised fields and other traditional agricultural landscapes of exceptional universal importance that warrant conservation as World Heritage Sites? The following are some crucial justifications for promoting, guarding, and preserving traditional agricultural landscapes:

1. The large gene pool of domestic, semidomestic, and wild species of landraces found in traditional agricultural settings is a valuable resource that may be mined for novel cultivars, higher resistance to diseases and pests, improved storability, and more diversity (recognised by UNESCO).
2. Environmentalists, conservationists, and social and natural scientists are beginning to acknowledge that the future of our planet's ecosystem will depend more on the manmade landscape. Scholars are starting to realise that all habitats are anthropogenically influenced to some extent and that wildness is a cultural construct.
3. Agricultural landscapes are dynamic spaces where local, regional, and national cultures may be seen and heard. It's common to compare the cultural variety of living populations within landscapes to biological diversity. A strong feeling of place, belonging, and identity founded in local history and prehistory and ingrained in the terrain, which links past, present, and future, is often necessary for cultural survival.
4. Agricultural landscapes are physical records of agriculture, risk management techniques, building technology, environmental change, and historical ecology. They are characterised by a complex tiered palimpsest of structured human activity across time. In many situations, the only trace of previous residents is the archaeological record of their activities on the terrain.
5. Agricultural landscapes provide regional, tried-and-true examples of suitable technology and sustainably using land (recognised by UNESCO [2002:9] and the International Union for the Conservation of Nature, or IUCN [McNeeley 1995]). Resilience, long-term continuous usage, large carrying capacities, and ecologically benign practises may all be shown by archaeological and historical study.
6. Because they serve as both a reflection of and a model for society, cultural landscapes are crucial for the spread and preservation of regional culture. Native cultures are strengthened through local, national, and worldwide appreciation of traditional agricultural landscapes.
7. Native Americans can be more successful in their campaigns for political representation, economic development, the reinforcement of local cultural identity, and the resolution of land disputes if there is global appreciation and recognition of the cultural heritage and indigenous knowledge systems embedded in agricultural landscapes.
8. The importance of agricultural landscapes for national and international tourism in terms of the environment, culture, history, and archaeology may be a source of revenue for the local population.
9. Increased cultural tourism that emphasises the "lived in" agricultural landscapes of Bali, Cuzco (Peru), the islands of the Sun, Taquile, and Amantani (Bolivia and Peru), as well as the Ifugao (Philippines), benefits indigenous people [3], [4].

Crop productivity and sustainability are two examples of agricultural landscape "values" that may be measured and quantified. Traditional agricultural experiments and field trials provide crucial data on function, ecological suitability, production rates, cropping frequency, carrying capacity, and sustainability. Cost-benefit analysis offers benchmarks for contrasting Western and other non-Western agricultural systems with Andean traditional agriculture (PIWA 1994). Science may be used to resolve concerns about appropriateness and sustainability (Denevan 2001; Erickson 1996; Morion 1996). Experiments, cost-benefit analyses, production rates, resource management, and societal acceptance and rejection difficulties were all part of the practical research conducted in the 1970s and 1980s that significantly contributed to the scientific validation of raised fields. In a variety of academic and public contexts, this study conducted by college students, professionals, and indigenous peoples was presented and published. Despite the fact that there is less research on raised fields and other Andean technologies than there is for Western agricultural systems, this research shows that raised field agriculture has the potential to be a sustainable technology in specific situations and settings.8 In establishing the "value" and sustainability of World Heritage, several writers in this book emphasise the significance of cultural capital. Can the aforementioned agricultural landscape's natural, ecological, aesthetic, historical, archaeological, religious, and cultural importance be quantified in monetary terms? Studies on the environment's economics and the art market reveal promise [4], [5].

It will take some time for cultural landscapes and the subclass of traditional agricultural landscapes to achieve the same degree of recognition as excellent natural landscapes, archaeological sites, and historical structures, sites, and monuments. In order to safeguard cultural landscapes, the United States and Europe have created new organisations and passed laws. In certain nations, like England, the agricultural landscape is protected and managed as a whole. Unfortunately, I do not see any imminent equivalent developments in Latin America. Bulldozers have been used to plough over pre-Columbian terraced fields and raised fields in the Lake Titicaca basin during development projects funded by the World Bank Project, the National Agrarian University, and the International Experimental Station Illpa, which Peruvians would never permit on Machu Picchu (Erickson and Candler 1989). Through active designation and promotion of agricultural landscapes as World Heritage Sites, UNESCO and other international organisations may have an impact on national and local policy. Physically speaking, raised fields are a part of the Andean agricultural landscape. Given the right circumstances, Andean farming (past and present) is dynamic, resilient, time-tested, and sustainable due to the complex patterning, long history of use, high productivity, population carrying capacity, and local historical and ecological appropriateness documented for raised fields and other traditional agricultural strategies on the landscape. These qualities of Andean technologies make them potentially useful alternatives for development at this crucial period of climate change, population growth, political unrest, and ingrained inequity [5], [6].

For the modern world, agricultural landscapes offer both material and intangible significance. The elevated fields of the Lake Titicaca region, for example, are agricultural landscapes that I would contend have "outstanding universal value." The indigenous expertise of the farmers who developed the ancient agricultural landscapes across the Andes is in risk of disappearing forever. These landscapes have been neglected for 400 years as a result of rural depopulation, the introduction of Old World crops and animals, and governmental policies in the wake of the Spanish conquest. Today, these landscapes are threatened on all sides. The demands of

agribusiness, cash cropping, and cultivated pasture are driven by national and international policy, the global economy, unchecked population growth, and the imposition of Western models of development. Poorly planned urbanisation encroaches on traditional fields; mechanisation of agriculture increasingly erases fragile remains of pre-Columbian fields; and mechanisation of agriculture increasingly erases pre-Columbian fields. Landscapes used for traditional agriculture have been harmed by all. By helping to alter development policy that is now biassed against indigenous knowledge systems, UNESCO can be a strong worldwide champion for traditional agricultural landscapes. Traditional archaeological and inhabited traditional agricultural landscapes cannot be adequately protected under the current definition and conception of cultural landscapes as World Heritage by UNESCO. Following the site idea prevents traditional agricultural landscapes from being seriously considered until they are unintentionally included inside the boundaries of important monuments, structures, sites, or natural regions [7], [8].

By assisting in assuring them of a sufficient standard of living, land titles, education, access to markets, and freedom from war and violence, we can ensure that farmers (i.e., smallholders) who are surviving on long-farmed landscapes and using traditional sustainable technology remain there. This is a difficult undertaking in the majority of developing countries. Maintaining a populated "continuing landscape" is significantly simpler than revitalising a "relict landscape." When there is evidence that a piece of land has previously been actively and effectively farmed, UNESCO's official designation of these landscapes as World Heritage sites may act as a trigger to retain farmers on the property and encourage them to repurpose it.

In the event that traditional agricultural landscapes are determined to have "outstanding universal value," certain priorities must be set. Few people would contest the merits of all traditional agricultural settings as World Heritage Sites. Some cultural landscapes are considered "relict" because they failed in the past for a variety of reasons. certain classic methods of operation Future agricultural systems may not exist. All traditional practises cannot be managed, protected, or promoted by UNESCO or other organisations. Agricultural settings, hence some kind of triage for preservation is required. Priority should be given to traditional agricultural landscapes that have historically been viable or are now in operation. Because they are sustainable and self-sufficient, there are many inhabited "continuing landscapes" in existence. Farmers in certain ongoing environments require assistance because they are at danger from the outside world. Landscapes that have been abandoned or are now used in ways that are not sustainable but include archaeological evidence of sustainable farming practises should be investigated, assessed, and, if they satisfy specific requirements, conserved and administered as World Heritage Sites [9].

Unique agricultural landscapes that are in danger of disappearing completely should be given priority, as should those that have the potential to support both current and future populations. When referring to a dynamic and intricate agricultural environment, phrases like "conservation" and "preservation" are usually inappropriate (Cook 1996). Any effort to preserve a rural area in some former or current condition as a museum piece or family treasure would be rejected. Instead of conservation or preservation, the aim should be active management that engages the local populations that use such environments. Landscape management must use archaeology and historical methods when agricultural technology and expertise have been lost. The constructed agricultural landscapes of the Andes were created by human actors, farmers making deliberate choices about the land for their own and future generations' livelihoods, and they reflect an

accumulation of landscape and cultural capital over lengthily periods of time. To manage traditional agricultural landscapes successfully, it is necessary to comprehend and value both the people, both past and present, as well as the science, logic, and aesthetics of their indigenous knowledge systems. Numerous societal segments will need to actively participate in its administration [8], [10].

CONCLUSION

Beyond their physical and biological features, traditional agricultural landscapes have enormous intangible cultural significance. This value may be found in the customs, belief systems, festivals, rituals, and interpersonal connections that have long been woven throughout agriculture. We have discussed the significance of appreciating and preserving the intangible cultural assets connected to traditional agricultural landscapes throughout this essay. By protecting these landscapes' intangible cultural worth, we support sustainable development, community identity, and heritage preservation. Cultural practises are more likely to be passed down from generation to generation thanks to the persistence of the cultural traditions and knowledge systems ingrained within these environments. The intangible cultural legacy of traditional agricultural landscapes may draw cultural tourists, bringing in money for the local economy and aiding in the sustainable development of rural regions, therefore their preservation also has economic value.

Case studies from different areas have shown the numerous intangible cultural values that may be found in traditional agricultural settings. The importance of oral traditions, storytelling, traditional agricultural methods, indigenous knowledge, and community-led efforts in maintaining and reviving intangible heritage is highlighted by these instances. They show how agricultural methods, cultural manifestations, and the wise use of natural resources are all interrelated. Adopting integrated strategies that engage local people, academics, policymakers, and heritage organisations is crucial for ensuring the preservation of the intangible cultural worth of traditional agricultural landscapes. The rights, ambitions, and traditional knowledge of the communities who are the guardians of this intangible legacy are respected via inclusive and participatory methods. Important elements in this preservation endeavour include encouraging capacity-building projects, including communities in decision-making processes, and creating intergenerational discussion. Interdisciplinary efforts are also crucial for comprehending the intricate interactions between the material and immaterial components of traditional agricultural landscapes.

We may fully comprehend the cultural, social, and ecological aspects of these environments by integrating the knowledge of anthropologists, archaeologists, historians, ecologists, and locals. Effective conservation plans that balance historical preservation, sustainable land management, and community well-being may be informed by these relationships. Traditional agricultural landscapes have an important place in our common history because of their intangible cultural significance. Recognising, preserving, and reviving this intangible legacy supports community resilience, fosters sustainable development, and helps to preserve cultural variety. We can preserve the durability of traditional agricultural landscapes and respect the cultural traditions and practises that have maintained them for centuries by acknowledging the interaction between physical and intangible features.

REFERENCES

[1] A. R. Verdi, "Preservation, innovation and governance: Geographical indication of grapes in Jundiaí (Brazil)," BIO Web Conf., 2019, doi: 10.1051/bioconf/20191503016.

[2] L. J. Moscoe and E. Emshwiller, "Farmer Perspectives on OCA (Oxalis tuberosa; Oxalidaceae) Diversity Conservation: Values and Threats," J. Ethnobiol., 2016, doi: 10.2993/0278-0771-36.2.235.

[3] J. Makhzoumi, S. Talhouk, R. Zurayk, and R. Sadek, "Landscape Approach to Bio-Cultural Diversity Conservation in Rural Lebanon," in Perspectives on Nature Conservation - Patterns, Pressures and Prospects, 2012. doi: 10.5772/33343.

[4] B. Torquati, L. Cecchini, S. Venanzi, and G. Giacchè, "Economic Analysis of the Traditional Cultural Terraced Olive-Growing Landscape and Participatory Planning Process," in Environmental History (Netherlands), 2019. doi: 10.1007/978-3-319-96815-5_16.

[5] A. Abu Al Haija, F. Giannini, and C. Gambardella, "Jordanian Villages and Landscape: More Sustainable Planning, Less Physical and Social Degradation," Less More Architecture Design Landscape. 2012.

[6] Kim Sangbum, Y.-K. Shin, and 손호기, "A Overseas Case Study for Institutionalization of the Agricultural and Rural Heritage in Korea," Korean J. Agric. Manag. Policy, 2012.

[7] Z. H. S. Amper, I. D. Rios, V. A. Caumeran, R. J. Rigor, and T. C. Sarile, "Panaad and the Paril: Traditional systems of soil and water conservation in Cebu, the Philippines," Int. J. Intang. Herit., 2018.

[8] T. Molnar, "Spectre of the Past, Vision of the Future – Ritual, Reflexivity and the Hope for Renewal in Yann Arthus-Bertrand's Climate Change Communication Film 'Home,'" M/C J., 2012, doi: 10.5204/mcj.496.

[9] L. Nahuelhual, A. Carmona, P. Laterra, J. Barrena, and M. Aguayo, "A mapping approach to assess intangible cultural ecosystem services: The case of agriculture heritage in Southern Chile," Ecol. Indic., 2014, doi: 10.1016/j.ecolind.2014.01.005.

[10] T. Waryono, "Ringkasan Puding merah (Gruptophyllum pictum L Griff)," J. Farm. Galen. (Galenika J. Pharmacy), 2019.