

Maya architectural heritage conservation in urban contexts. A proposal for a network of archaeological parks in Merida, Yucatan

Josep Ligorred Perramon, Blanca Paredes Guerrero

Faculty of Architecture of the Autonomous University of Yucatán (Mexico)

Abstract: The permanence of Mayan architecture in the urban contexts of the towns of Yucatán is subject to the urbanizing and modernizing processes of Latin America. A weakness of this architecture is its state of preservation most of it is abandoned, in "ruins", or buried under the current cities. However, archaeologists have recorded and intervened innumerable cases for decades, more and more frequently because of the pressures of urban development, although this has not been enough to achieve their valuation and social use. Currently technological advances for registration and documentation offer the possibility of applying in regulations the protection and integration of these architectural vestiges as axes for the sustainability and resilience of current towns and cities. In the case of the municipality of Mérida, there is an extensive registry of this architecture, from pyramidal buildings to remains of Mayan dwellings that date from the first millennium BC to the conquest. The interesting thing about these contexts is found in the superposition that is observed in these places, offering a diachronic reading of regional history, which can be the basis for a harmonious urban landscape with the social fabric and the natural context of the territory. The objective is to contribute to the problem raised through the proposal of an alternative model of public management of the built heritage with the network of archaeological parks of Mérida that has its base in the elaborated research and that we will present in this article.

Key words: Maya architecture; heritage management; network of archaeological parks

1 Introduction

A weakness of Maya architecture in the urban contexts of Yucatán's towns is its current state of preservation; most of it lies in "ruins" or buried beneath today's cities. However, archaeological research over the past decades has documented and intervened in a significant number of cases, increasingly in response to rapid urban development itself, although this has not been sufficient to ensure their appreciation and social use. Currently, technological advances in the recording and documentation of these remains (satellite imagery and LIDAR, ground-penetrating radar surveys, the use of drones, etc.) offer the possibility of incorporating the protection and integration of these architectural vestiges of the past into the regulations and urban planning of today's towns and cities.

The intersections between the city and heritage, within the context of their evolution, have been in constant tension and conflict; however, they have also led to the recognition of heritage, archaeological, historical, and natural sites and monuments, which are valued in urban development as elements that enhance the quality of space and serve as catalysts for strengthening social and cultural memory. Since 1972, in Mexico and at specific points in time after that date, initiatives

and regulatory measures have emerged that reflect this revaluation. Thus, the Mérida Historic Monuments Zone, recognized at the federal level in 1982; the Heritage Sites recognized at the municipal level since 2004; and the archaeological sites that have combined federal and municipal recognition since the 1990s, have gone from being considered obstacles to being valued as important catalysts for urban growth, offering opportunities for sustainable development and supporting the resilience of the metropolis itself (Paredes and Ligorred, 2015).

We propose an approach in which Mayan architectural heritage, through a network of urban archaeological-ecological parks, can serve as a strategic focal point for planning initiatives aimed at its urban integration and protection, as well as for research and outreach.

The first part of this text outlines the city's historical evolution, followed by the second part, which examines the historical contexts within the urban fabric that has developed from the first decree on Monument Zones in Mexico in 1972 to the present, as we approach 2021. Here we highlight their location, the contexts in which they are situated, and the opportunities for urban scale that these places represent.

2 The conservation of Mayan architectural heritage in the city of Mérida

This research is based on the observation that, historically, urban and territorial development management has failed to incorporate cultural and natural heritage as strategic elements of urban sustainability; as a result, urban and territorial development and heritage have been conceptualized, planned, and managed in isolation, without an integrated vision of public action in this area. Consequently, the territorial expansion evident in our cities, as well as redensification processes driven by financial and economic profitability criteria, have impacted cultural and natural heritage in various ways.

This phenomenon, in historic districts and across the various historical layers of the region, has transformed the lives of its residents by encouraging investment in tourism and recreational activities to integrate them into national and global markets, thereby fostering wealth creation and development without social inclusion. Heritage management in cities impacts the region and the lives of its residents, altering the urban socio-spatial fabric.

This article is part of an assessment of the relationship between urban and social development and cultural and natural heritage, as reflected in the history of the city of Mérida and its metropolitan area. We examine the impact that urban development and policies—in their legislative and regulatory aspects—have on the archaeological heritage of cities.

In this paper, we discuss the concept of an archaeological park—currently under development—by drawing on the contributions of Amalia Pérez-Juez (2006), as well as the normative definition established in Mérida in the 2003 Urban Development Program and the author's own definition (Ligorred 2009). Furthermore, the proposal for the network of archaeological parks considers strategies and indicators that enable a different approach to collaborative management between authorities and citizens, based on a comprehensive and sustainable conception of urban and social development, with the aim of placing the needs of residents at the center of its plans and proposals for the use of the built cultural environment and its natural resources, so as not to undermine the inherent values of culture and residents' right to the city.

3 Archaeological parks

Amalia Pérez-Juez (2006:193) considers archaeological parks to be one of the categories into which archaeological sites that have been developed and opened to the public could be classified. For the author, the concept of an "Archaeological Park" is one of the most difficult to define in the context of cultural heritage management, and she believes that the use of the term in Spain "is indiscriminate, without assessing what kind of remains, infrastructure, or conditions must be present for an archaeological park to effectively exist" (Pérez-Juez 2006:212). She also points out that "laws and regulations do not even define it" and that "it is included in programs for job creation, tourism promotion, or cultural dissemination, and in their respective budgets." For Pérez-Juez, the confusion stems from the fact that "it is not a

legal concept defined as such." In that country, the author states that the term has been in use since 1989, when there was an attempt to define the concept and give it precise content, but the result was a series of archaeological park projects.

It should be noted that the UNESCO conventions signed by Mexico regarding archaeological heritage have had an impact on heritage policies since the ratification of the Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972); in that same year, Mexico enacted the Federal Law on Monuments and Archaeological, Historical, and Artistic Zones (1972), which remains in force to this day. This law designates the INAH as the institution responsible for archaeological and historical heritage, promotes a management model for monuments and archaeological zones, and establishes the procedures and regulations for opening archaeological sites to the public. However, it does not establish mechanisms for their integration into the territory and urban development in the case of cities, so that ruins or abandoned sites are frequently destroyed or, at best, rescued through salvage work and emergency interventions. Regulatory frameworks do not yet address the conservation and integration of archaeological sites into living communities.

The problem facing archaeological sites in living towns—such as those in the city of Mérida, which lie in a state of disrepair within the urban fabric—is the exact opposite of conservation: neglect and the lack of institutional projects at these sites often lead to the destruction of the remains in the face of urban development. Their potential role in heritage markets and in shaping the urban image, as well as their potential social benefits, are overlooked when planning archaeological projects and the city, which, as we have noted, prioritize public investment in sites isolated from local population centers, for exclusively tourist consumption. This perpetuates "the abandonment and lack of use and community appropriation of unrestored sites immersed in urban sprawl" (Ligorred, Liendo, and González Iturbe 2017).

In Mexico, we have observed a significant disparity between the restoration, promotion, and opening of archaeological sites intended for tourism—located away from population centers and expected to generate high economic returns—and archaeological sites in urban areas, where the primary "audience" is, or would be, local residents (here, the return would be solely of a social nature).

In Mérida, Yucatán, an alternative model has been developed through intergovernmental coordination and, above all, the participation of the municipality in the management of its cultural and natural heritage. This alternative model, which has received little support from the federal government, responds to a proposal for municipal management and social participation, aiming to integrate pre-Hispanic Mayan ruins — which are in a state of disrepair and immersed in the dynamics of urban development—into public spaces.

Legally, the municipal administration also relies on the agreement with the INAH signed in 2002 and ratified in 2005 and 2018. The Agreement establishes inter-institutional collaboration between the federal agency responsible for heritage protection, the INAH, and local authorities, in this case the City Council of Mérida. The time required for each ratification by the INAH sometimes exceeds the term of the municipal administration, as was the case between 2007 and 2018.

In the Urban Development Programs from 2003 through 2018—which are currently in effect and published in the Official Gazette—an archaeological zoning plan for the municipality is presented, and actions are outlined that highlight the importance of conserving and protecting municipal heritage. The zoning classifies three areas: Archaeological Core Zones, Archaeo-Ecological Corridors, and Archaeological Parks.

These areas are defined as public spaces that contain pre-Hispanic Mayan ruins and therefore require a different management approach than other city parks, as their operational programs must include surveillance, the promotion of research and consolidation, maintenance, and signage for the archaeological monuments. Currently, these areas cover more than 160 hectares of the municipality. This includes parks with remains consolidated by the INAH that existed prior to 1998, areas donated to the municipality for the development of infrastructure projects in new residential developments, and

reserve areas for archaeological research maintained by the INAH.

Given the significance of each of the pre-Hispanic sites and natural features, as well as the characteristics of their location within the city, they can be integrated through a network of archaeological or archaeo-ecological parks; this will also depend on the surrounding terrain and the stage of succession of the vegetation cover on those lands (Ligorred 2009:68-71).

In previous works, we have highlighted the need to reinvent mechanisms for participation and intervention, so that the INAH's model of archaeological sites open to the public can be analyzed, and criteria established to promote other more flexible and viable models of activation, such as public spaces and archaeological parks, for example, or to discuss the advisability of regulating construction activities in archaeological protection zones, so that developers of new residential developments subsidize the integration of the remains into the cultural landscape.

4 Transformations in Mérida

We can only understand this contemporary city as the result of the historical layers that preceded it, the earliest of which is the Mayan city of T'Hó, which in the 16th century became Colonial Mérida. In the 19th century, following the War of Independence and the resulting stagnation in the country, the city underwent another transformation during the henequen boom, entering the 20th century at a time of profound change; However, change did not stop throughout this century, as it was characterized by substantial growth of the city and its historical layers—like a palimpsest with erasures and rewritings that are difficult to read—which continued to be reworked up to the present 21st century.

The buildings of T'Hó or Ichcañihó, as described by Fray Diego de Landa in the 16th century, reached a height "that is awe-inspiring" and were of such "strangeness and grandeur" that they led the Spanish conquistadors—Castilians, Andalusians, and Extremadurans—to "settle a city here and call it Mérida," in memory of the city of the same name in Extremadura, known for its ancient Roman structures (de Landa, 1994; Ligorred, 1998).

Despite the fascinating observations that the vestiges of its ancient identity have elicited over the centuries, Mérida, the political capital of the state of Yucatán and cultural center of the Peninsula, has a public image of a colonial city exclusively, with its imposing Mayan past largely unknown.



Figure 1. Virtual reconstruction of the main buildings of T'Hó in the Historic Center of Mérida, based on archaeological and historical data, superimposed on Salazar Ilarregui's map (1864–65). Created by Josep Ligorred, Jonatan Castro, and Gonzalo Pérez Chan in 2009

Archaeology has proven extremely useful, as it has provided a broader understanding of this Mayan foundation still present in the city—though not necessarily visible—in the central area that today corresponds to Mérida's Historic District (Ligorred, 1999), as well as in other peri-urban areas, such as Dzibilchaltun and Xoclán.

During the colonial period, the Spanish urban layout was superimposed onto the very different structure of the Mayan city, which could not be completely erased; the result was a hybrid morphology that reveals the cultural overlap that occurred when the colonizers occupied the site and erected their first buildings. The Mayan city was centered and organized around enormous structures built on "I"-shaped platforms oriented according to the stars.

"[...] The three majestic structures within sight could have provided stone for as many other cities, and in order to facilitate the work of the workers, it was agreed that the buildings would be erected between the hill where the camp was located and the one that today supports the old walls of the citadel (Ancona, 1889, p. 9)."

Historical accounts of the works carried out in the ancient Mayan city of T'Hó indicate that even the conquistadors...

"...had initially lodged in the buildings on the Baklu'umchan platform and in some straw huts, likely built around the pyramid, in order to be ready to defend against any attack that might be launched against the camp (Ancona, 1889, p. 9)."

The urban morphology of Mérida was therefore determined by the presence of Mayan structures and by the city's ancient roads (Figure 1). Architect Aercel Espadas Medina, a scholar of the city, has presented analyses showing how the colonial urban layout corresponded with two ancient roads of T'Hó and, consequently, its orientation, as occurred in so many Latin American cities (Espadas, 1993, 1995).

On the other hand, historical information regarding the founding of Mérida is very limited; the only document available is the city's charter, which refers to a map that has remained unknown until now. This circumstance has led to hypothetical reconstructions of the early layout of Colonial Mérida (Figures 2 and 3).

At a town council meeting on December 29 of that year:

"...the Lieutenant Governor had come prepared to grant this request, for he immediately took from his breast a large parchment containing the city plan and laid it on the town council table. Each resident had a plot marked on it, which they could verify by reading their name written at the location designated for them. He ordered a copy of this distribution to be entered into the town council's book, designating five hundred paces around the town's layout for the town proper and the outskirts, and it was decreed that no one should erect any structure within this space on pain of losing it (Ancona, 1889)."

From the end of the colonial period until the first half of the 19th century, Mérida was a city that grew slowly; however, with the boom in agro-industrial henequen production, the city expanded and gained national prominence alongside other prosperous capitals in the country at the turn of the 19th and 20th centuries. This rural industry, moreover, also contributed to keeping the majority of Yucatán's population living on henequen haciendas until the 1960s, when the monoculture of the agave known as henequen (and abroad as sisal) came to an end, and the phenomenon known as the urbanization process began for the capital.

5 Urban development in Mérida, 1972–2019

In the 1970s, the expansion process began that continues to this day, primarily due to migration from rural areas—intense between 1970 and 1990—as, especially in recent years, from the national and international spheres, the former attracted by security conditions and the latter by the historical, cultural, environmental, and natural wealth of the vegetation and coastline, as well as the services and infrastructure in the State of Yucatán.

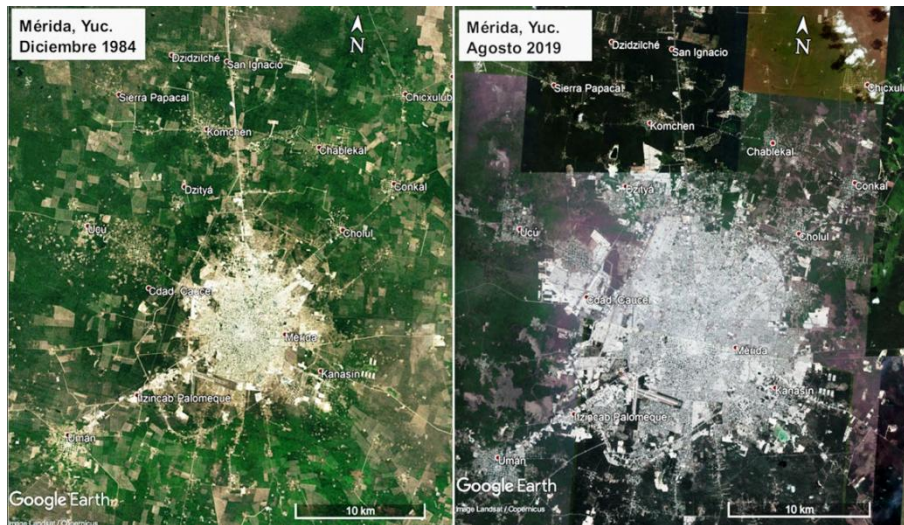


Figure 4. Satellite images of the city of Mérida showing the exponential growth of the urbanized area over the past 35 years (taken from Google Earth)

Furthermore, once a Metropolitan Zone was designated—even before it became a reality—a large number of small settlements, such as former haciendas and archaeological sites in the Municipality of Mérida, were included within the area of interest for real estate "development." This has resulted in a fragmented zone in terms of services, infrastructure, and amenities, but above all, it has impacted nearby communities, altering their social and rural dynamics and redefining their growth or development in an exogenous manner, thereby posing a significant risk of displacing the space and culture of these indigenous communities.

The urban expansion driven by the real estate sector and governments in recent decades has led to continuous physical movement between the city and nearby settlements, giving rise to suburban areas and an even more rapid expansion of the city. With the urbanization of these formerly rural areas, the three aspects noted so far are reinforced: a) a shift in the relationships that bind the original settlements together, due to the arrival of new and more numerous residents; b) loss of vegetation in the face of high-density construction, driven primarily by large-scale housing development; and c) the disappearance of local culture, particularly the architectural heritage stemming from millennia-old historical layers in Yucatán.

6 Architectural continuities for urban development

The challenge posed by urban expansion that is disjointed, fragmented, and disconnected from the urban fabric raises many questions: how can we move toward more orderly urban growth? There is no single answer to such a broad question, but specifically for this study, we ask: can the conversion of forested land to other land uses—which place heavy demands on public services—mitigate the effects of deforestation and land-use changes that are inconsistent with natural vocations and aptitudes? Furthermore, given that many archaeological sites are located in forested areas, is it possible to integrate them into the dynamics of urban life in the 21st century?

Little has been known with certainty about the urban and municipal developments in Mérida and the historical layers that may shed light on the long history of Mayan-Yucatecan urban architecture. However, since the last decade of the 20th century, there has been a precedent for the establishment of a Department of Archaeological and Natural Heritage within the Municipal Urban Development Office, promoted by Josep Ligorred, whose primary function was to exercise, for the first time in the history of the City Council, control to regulate changes in land use in areas with pre-Hispanic remains, colonial buildings, and natural spaces (compatible, conditional, or incompatible uses), through heritage zoning of the

municipality. Prior to this, the Mérida City Council granted land-use permits without considering the presence of such elements and, of course, without conducting impact studies on them or designing and promoting rescue and/or salvage activities.

At the beginning of the 21st century, surveys were conducted throughout the municipal territory to identify specific characteristics of the structures at archaeological sites and historic complexes, while also focusing on natural features (such as soil types in their contexts and water sources) in order to determine their probable dimensions and geographical boundaries. The survey also included sites identified by local informants, sites not mentioned in the atlases, and added others that, although known, were not referenced, such as certain city parks.

Thus, an initial assessment of the spatial planning of Mérida's heritage was developed, and measures were taken to ensure its protection, study, and integration through its incorporation into the 2003 Urban Development Program. Using information on archaeological sites, the archaeological zoning of the Historic Center, and the two areas protected natural areas (Dzibilchaltún National Park and the Ecological Conservation Zone—Cuxtal Reserve) and the cenotes, maps of the cultural and natural heritage of the municipality of Mérida were displayed (Ligorred, 2009).

To date, the registry of archaeological sites stands at 223, a significant increase from the 98 sites recognized in the 1980 Atlas (Garza and Kurjack, 1980), primarily due to corrections to municipal boundary maps, intermunicipal agreements regarding those boundaries, the review of reports and publications on recent archaeological work, and, importantly, collaboration agreements between the municipality and the INAH. Through this municipal initiative, public spaces were created around pre-Hispanic and colonial Mayan architectural remains, mostly in the form of urban parks. To date, there are more than 20 parks, most of them located on the eastern and western edges of the city, although more parks are recently being added in the northern part of the municipality (Figure 5).



Figure 5. Map showing the locations of the current archaeological parks and haciendas in Mérida. Prepared by: Josep Ligorred, Blanca Paredes, and Alexis Zapata in 2019

7 Network of public spaces: archaeological-ecological parks

It is urgent to ensure the preservation of archaeological sites by developing proposals and urban integration projects in the areas designated as archaeological protection zones in the Urban Development Program. Rigorous oversight is needed

to ensure proper regulation of the land use and efficient technical management of archaeological heritage will make it possible to integrate the vestiges of the past into urban development as part of the public infrastructure through a network of public spaces and/or themed parks. Control over urban infrastructure improvement projects and the planning of new subdivisions must be a priority in municipalities such as Mérida, where rapid growth threatens their cultural heritage (Ligorred, 2009, p. 413).

To date, there are 21 such parks, most of which are located at the eastern and western ends of the city, although more parks have recently been added in the northern part of the municipality. Several of these parks—particularly those resulting from strategies implemented over the past 15 years to preserve large-scale archaeological reserves—also protect examples of native vegetation and some of the associated wildlife. Contexts such as these help highlight the Mayan dimension of the territory, from its pre-Hispanic origins to the landscape in which many of the activities of the current Mayan population still take place in other regions of the Yucatán Peninsula.

These twenty or so public areas form a network of urban parks unlike any found elsewhere, as they are structured primarily around existing historic buildings—which are, in fact, the defining feature of the site. Because these areas are municipally owned, they have become recreational spaces for social interaction and remembrance, incorporating non-intrusive infrastructure such as walkways, trails, rest areas, and plazas, intended primarily to be visited by residents and employees as attractive places for walks, gatherings of civic groups, and for engaging in sports—usually walking—or as venues for ceremonies and traditional games, book presentations, concerts, or simply for stargazing on certain nights. However, they are open to any visitor (Figure 6).



Figure 6. Invitation to participate in a guided tour organized by the Xoclan Archaeological Park, with funding and support from the Mérida City Council

It is in this sense that highlighting the rich heritage of these spaces takes on greater significance, as it adds features to our understanding of the city that would otherwise be overlooked, given the prevalence of discourses more closely tied to the colonial character that is applied in tourism promotion and, unfortunately, in the city's collective imagination.

Contexts such as these make it possible to highlight human occupation of the territory, from origins as remote as the pre-Hispanic era to the landscape in which many of the ancestral activities of the current population are still carried out in other regions of the Yucatán Peninsula.

These sites have also been part of strategies implemented over the past 15 years to preserve large-scale archaeological reserves and historic sites, which has resulted in the conservation and protection of significant examples of native vegetation and part of the associated fauna.

The preservation of cultural and natural heritage offers the opportunity to address, in a sustainable manner, the transformations caused by urban growth, characterized by an increase in building density alongside a decline in vegetation cover; population growth and social imbalances; as well as the devaluation of pre-Hispanic ruins and urban architectural heritage in general.

In this sense, creating areas that allow for the preservation and visibility of built and natural cultural legacies is of great importance in light of the aforementioned risks; it also adds features to the city's narrative that would otherwise go unnoticed amid the prevalence of discourses more closely linked to the timeless and disorderly character promoted in tourism and in the fanciful imagination surrounding the city.

The richness and scope of the archaeological, architectural, and natural heritage of Mérida and its municipality, along with the region's cultural and demographic characteristics, offer an opportunity to develop an innovative and sustainable model of public management (Figure 7), resulting from a dialogue between urban transformations and the enduring aspects of heritage (Ligorred, 2013).



Figure 7. Drone photograph taken during a guided tour of the Chen Hó archaeological site in Mérida Recreation Park
(Photo: MCPA. Joaquín Venegas de la Torre)

The mechanisms proposed for this consist of working, through urban integration projects, on the areas designated for protection in the Urban Development Program. Here, it is important to exercise rigorous control over land-use regulations and achieve efficient technical management of the architectural and urban heritage. Likewise, control over urban infrastructure improvement works is essential in the planning of new subdivisions (Ligorred, 2009, p. 413).

According to Ballart, in any territorial context—and more specifically in each municipality—four fundamental types of heritage assets must be distinguished: the landscape quality of the territory, the quality of tangible heritage assets and

expressions of intangible heritage, as well as the quality of the built urban fabric (Ballart, 2018).

Therefore, urban development should proceed hand in hand with these heritage assets. Thus, in a modern city like Mérida, built upon an ancient city, development warrants a broader perspective and an additional effort from all those involved that operate within a city: public administrations, private companies, and civic organizations. All of these are active stakeholders who recognize that the return on investment in heritage is derived, on the one hand, from the benefits it brings to social cohesion among citizens and, on the other hand, from the significant interest in cultural tourism, which seeks to highlight what is authentic, original, and unique—the very essence of the municipality's heritage.

The case of the Xoclán Archaeoecological Park is one of the projects that has served as a catalyst for implementing an alternative model for the appreciation and social use of these spaces, and for structuring a network of parks with these characteristics within the municipality.

What is preserved and what is not? For several decades now, cultural facilities have been created in the parks of some neighborhoods in Mérida, but the problem remains one of neglect, due to the lack of comprehensive planning and the failure of municipal authorities and the private sector—primarily developers and business owners—to recognize the value of heritage.

In this regard, progress has been made in two areas: first, there have been recent developments in the municipality of Mérida through the Municipal Planning Institute (IMPLAN), which produced the document, *Municipal Strategies for Urban Resilience** (2018); on the other hand, two important projects: one stemming from the background described above in the Municipal Heritage Subdirectorate, which gave rise to the Xoclán Archaeoecological Park project in the 1990s; another significant precedent is Dzibilchaltún, located 16 kilometers from the center of the city of T'Hó, whose archaeological studies revolutionized the concept of Mayan cities (it was precisely the Dzibilchaltún plan that would serve as the basis for the 1987 decree designating it as one of the first National Parks in Mexico).

Furthermore, among its most recent proposals, IMPLAN has designated the Xoclán Archaeoecological Park as the "Great Lung of Mérida" (a flagship project aimed at implementing an alternative model for the appreciation and social use of these spaces, and at structuring a network of parks with these characteristics within the municipality).

It is in this sense, based on both the development of knowledge and experience with the cases mentioned, that we believe the network of public spaces and parks with the characteristics of the Mérida residents described here undoubtedly contributes to this, answering our initial question:

Urban development linked to historic buildings may give rise to land uses that place high demands on public services, thereby helping to mitigate the effects of deforestation and land-use changes that are inconsistent with the area's natural characteristics and potential; it is also possible to integrate such development into the dynamics of urban life in the 21st century.

8 Conclusion

Mérida owes its recognition to its past, based on a renewed local and external appreciation, as well as on the social use of its heritage; however, it remains a challenge to incentivize, within public policies, the promotion of the appreciation and social use of heritage, while avoiding regulatory overlaps and sectoral lack of coordination.

No nature-based urban solution has yet been implemented in that city or in the region with the aim of linking urban transformation to the conservation of the natural environment; however, the case of Xoclán is the first emerging initiative that is demonstrating its significance in fostering urban landscapes that are in harmony with the social fabric and natural contexts of the region.

Based on the concept of an archaeological park, we consider this category as proposal a framework comprising three

essential elements: the relationship between urban management and urban development policies; the close relationship between heritage conservation and urban development (recognizing the importance of the public dimension of the uses and meanings of heritage sites); and the significance of the fact that, in Mérida, there is a considerable area of at least 160 hectares of urban space that could be converted into an archaeological park, containing extensive vegetation and long-standing Mayan remains (where nature and culture converge and provide a great opportunity to enhance the current city).

The establishment of archaeological parks aims to address the destruction and neglect of areas containing pre-Hispanic Mayan ruins, as well as remaining green spaces, through a cross-cutting public policy that calls for joint efforts among public institutions and systematic, ongoing collaboration with civil society actors—a policy that must be put into practice. Achieving this cross-cutting approach will allow for better guidance, organization, and focus in the implementation of public policies, plans, programs, or projects, contributing to the generation of more information, and this is where the conservation of architectural heritage represents a cross-cutting element.

Archaeological parks—as a category encompassing archaeological sites that have been developed and opened to the public in urban areas, and defined as a framework for cultural heritage management—could also be considered in "programs for job creation, tourism promotion, or cultural outreach, and in the respective budgets," as a "legal concept" (Pérez-Juez 2006:212). This vast amount of heritage space makes a significant contribution to social memory and sustainability, resulting in a better quality of life for residents, both in urban areas and throughout the entire municipality.

From an academic perspective, the proposal to establish a network of archaeological parks entails redirecting urban development toward a city model that is unique to and accessible for its residents through culture and nature, via a comprehensive policy. This proposal for a comprehensive urban strategy that connects the scattered ancient Mayan sites in Mérida—which are in danger of disappearing entirely—could well begin to take shape through a network of urban parks.

For all the reasons outlined above, we are certain that, in contrast to the piecemeal approaches that have proven ineffective in many cities, urban planning must be conceived from the perspective of the totality and diversity of the socio-spatial spheres that give life to the modern city.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Ancona, E. (1889). *Historia de Yucatán. Libro III*. México: Editor Manuel Heredia Arguelles.
- [2] Ballart, J. (2018). *Paisaje y patrimonio. Un mismo destino a compartir*. Madrid: IAS Arqueología Editorial.
- [3] De Landa, D. (1994). *Relación de las cosas de Yucatán*. México: CONACULTA.
- [4] Espadas Medina, A. (2010) *Mérida sin M ni R. Sin mitos ni romanticismos de su fundación hasta su segunda modernización. Primera parte. Cuadernos de arquitectura de Yucatán, 23*. FAUADY, Mérida.
- [5] Espadas Medina, A. (31 de diciembre de 1995). *Mérida génesis y estructura*. Unicornio, suplemento cultural del diario *Por Esto!* Mérida, Yucatán.
- [6] Espadas Medina, A. (1993). *Mérida: La Traza Borbónica Última Virreinal, Primera Modernización*. En *Mérida: El Azar y la Memoria*. Mérida: APAUDADY.
- [7] *Estrategias Municipales para la Resiliencia Urbana (2018)*. Instituto Municipal de Planeación de Mérida (IMPLAN). Ayuntamiento de Mérida 2015-2018. Con la colaboración de ARUP International Development e Ithaca Environmental. Mérida, Yucatán. <http://isla.merida.gob.mx/serviciosinternet/ordenamientoterritorial/docs/EMRU.pdf>
- [8] Garza, S. y Kurjack, E. (1980) *Atlas Arqueológico de Yucatán*. México: INAH
- [9] Ligorred Perramon, J. (1998). *T'Hó, la Mérida ancestral*. Mérida: H. Ayuntamiento de Mérida, Dirección de

Desarrollo Urbano.

[10] Ligorred Perramon, J. (1999). T' Hó en el Centro Histórico de Mérida. Ichcanzihó, 1, p. 7. Dirección de Desarrollo Urbano. Ayuntamiento de Mérida

[11] Ligorred Perramon, J. (2009). La gestión municipal del patrimonio arqueológico en Mérida, Yucatán (México) (Tesis de Maestría en Ciencias Antropológicas con especialidad en Arqueología). Universidad Autónoma de Yucatán. Facultad de Ciencias Antropológicas, Mérida (Yucatán).

[12] Ligorred Perramon, J. (2013). La gestión de los sitios arqueológicos en las áreas urbanas del estado de Yucatán (México) (Tesis de Doctorado en Gestión de la Cultura y el Patrimonio). Facultad de Geografía e Historia de la Universitat de Barcelona (Catalunya).

[13] Ligorred, Josep, Rodrigo Liendo y José Antonio González Iturbe. 2017. Modelos de gestión del patrimonio arqueológico y arquitectónico: laboratorio y proyectos innovadores para su democratización. En Diversidad e identidad. Contextos del patrimonio cultural edificado. Coordinadora Blanca E. Paredes Guerrero. Universidad Autónoma de Yucatán. Mérida (Yucatán).

[14] Paredes Guerrero, B. y Ligorred Perramon, J. (2015) Conservación, sostenibilidad y desarrollo social. Zonas arqueológicas y pueblos vivos de Yucatán. En M. Nel-lo Andreu, B. L. Campos Cámara y A. P. Sosa Ferreira (Eds.), Temas pendientes y nuevas oportunidades en Turismo y Cooperación al Desarrollo. Actas del II Congreso de la Red Internacional de Investigadores en Turismo, Cooperación y Desarrollo COODTUR (pp. 142-115). Universidad de Quintana Roo, Universitat Rovira i Virgili y Universidad del Caribe. <http://www.coodtur.org/wp-content/uploads/2016/04/IICongr%C3%A8s.pdf>

[15] Pérez-Juez Gil, Amalia (2006). Gestión del Patrimonio Arqueológico. Editorial Ariel, Ariel Patrimonio, Barcelona.

[16] Programa de Desarrollo Urbano de la Ciudad de Mérida 2003. En Diario Oficial del Gobierno del estado de Yucatán 29969. 23 de septiembre. Mérida. 2003.

[17] Programa Integral de Desarrollo Metropolitano de Mérida (PIDEM). Fundación Plan Estratégico de Yucatán, A.C. Grupo de Desarrollo Metropolitano. Jorge Bolio Osés (Responsable Técnico) Alfonso X. Iracheta (Asesor principal). 2011. Consulta en <https://www.cideu.org/wp-content/uploads/2019/12/merida-pidem.pdf>

[18] Programa Municipal de Desarrollo Urbano. Instituto Municipal de Planeación (Coord.). Ayuntamiento de Mérida. 2018.

[19] Salazar Ilarregui, J. (1864-65). Plano topográfico de la Ciudad de Mérida, de Agustín Díaz. Mérida: Comisión Científica de la Comisaria Imperial de la Península de Yucatán.