



The Landscape Design Proposal for the New Archeological Museum of Cyprus

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Abstract: This paper deals with the landscape design strategy that was followed in the proposal that was submitted to the International Architecture Competition of the New Archaeological Museum of Cyprus. The aim of this document is to analyze how landscape and architecture interact. In the author's design proposal for the New Archaeological Museum of Cyprus, the various "gardens" integrated into the Landscape are analyzed. The concept of landscape design is related to the sacredness of trees to certain gods in Ancient Greece and Greek Mythology. The proposal addresses the symbolic meaning of trees and water. The design triggered the creation of several "gardens": the "Sacred Garden", the "Stone Garden", the "Olive Garden", the "Sacred Grove", and the "Public Garden", combining their soft landscapes with the hard landscape of the "Plaza" and the "Courtyard". Each figure in the garden has a symbolic meaning that allows for a dialogue between landscape and architectural design. In addition, the findings provide valuable insights into the historical and spiritual value of landscape elements (plants, water) that are also thermal regulators for sustainable urban planning. The research results may be of value to landscape architects, architects, and landscape designers in the Mediterranean region.

Keywords: landscape design; museum garden; sacred grove; stone garden; water features; symbolic meaning



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1. Introduction

1.1. Museums and Landscapes

Museums, more than many other buildings, deal with questions of space and place. When referring to museum space, we recognize the importance of the exhibitions created by arranging objects in that space. We also think of museums as places, as destinations for certain types of visitors, as great gathering places, and as safe places for families and children [1]. Space and place together define the essence of geography. Cultural geographers such as the American scholar Yi-Fu Tuan encourage us to think more deeply about these everyday concepts and explore what we mean when we perceive space and create places: "Space" is more abstract than "place". When we understand it better and give it value, the initially undifferentiated "space" becomes a "place". Architecture also deals with the spatial qualities of a place and the place-related (place) qualities of a space. The definitions of the terms "space" and "place" are interdependent. From the security and stability of place, we perceive the openness, freedom, and threat of space, and vice versa. If we also imagine space as a space that enables movement, then the place is a pause; every pause in movement makes the place different [2].

The museum experience is wonderfully multi-sensory because it is based on the movement of the human body through space. We can feel the different textures of the floor and hear our footsteps on carpet, marble, or wood. We are often surprised by the prospect of a long gallery or the "a-ha" moment when a masterpiece unexpectedly appears before us. While casual museum visits have a lot of serendipity, museum spaces are designed to constrain and guide visitors, allowing them to see works in sequence, following the path

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of thought or thesis they want to investigate [3]. Tuan [2] defines place as a pause that transforms a space into "a particular object... a concretization of value". He proposes that all enclosed and inhabited spaces are places that provide protection and order from the vastness and chaos of the undifferentiated world. When you pause in a gallery, look at and experience the objects on display, and enjoy the color and light, you become aware of the place [4].

In the 19th century, public museums were conceived as places where visitors could experience beauty, peace, and order. Founders hoped to impart these qualities to visitors as a reprieve from the chaotic disorder of industrial city life. Many contemporary museum designs also seek to create extraordinary spaces, though calm and relaxation are not necessarily the focus of the mission. Museums have different characteristics, being built as places of learning, anchors of urban renewal, or cultural tourism destinations. The level of success in this role varies, and sometimes an architectural masterpiece does not necessarily make a memorable place [4].

The role that a museum's presence in its environment plays for the well-being of our communities and visitors may be greater than we think. This framework may not be right for every case but, in general, it is believed to lead to a better understanding of space and place. The role of human experiences and rituals in creating memorable places can benefit museums that strive to balance the demands of cultural tourism, destination marketing, and community engagement. People need space and place. Human life is a dialectical movement between protection and adventure, connection and freedom. In a museum open space, you can be intensely aware of the place; in protected solitude, the vastness of space beyond takes on a haunting sense [1].

According to Spring [5], landscapes, especially gardens, can provide spaces for outdoor recreation, education, and therapy. In particular, visiting gardens surrounding a building can bring joy [6], restore cognitive attention [7], reduce stress [8], and promote mental, physical, and social well-being for people with disabilities [9]. Visiting gardens is of great interest to the public.

Furthermore, gardens can be enjoyable for everyone because they offer visitors a variety of sensory experiences. Goulty [10] noted that gardens are "our most accessible art form". Therefore, gardens have the potential to provide inclusive, enjoyable, and memorable visitor experiences for people of all abilities, regardless of age, gender, disability, race, origin, religion, economic, or social status.

An important benefit for visitors is that gardens stimulate all of their senses: sight, hearing, taste, touch, and smell. In addition, the multi-sensory experience of gardens is particularly interesting for blind and visually impaired visitors. Gardens are also constantly changing: they grow, bloom, decay, and renew themselves over the four seasons. Other dynamic factors include changing weather, active wildlife, changes in colours and beauty, garden design, etc. [11].

An interesting example is the National Archaeological Museum of Athens, which is planned as part of a major renovation by David Chipperfield Architects (2023), where, according to Tzortzi [12], the creation of a continuous interior space and the use of interior and exterior glass walls in this case allow for a visual connection between the museum's activities and the public space, reinforcing the sense of encounter and heightening the visitor's awareness of a shared presence inside and outside the building. Furthermore, the extension is conceived as a landscape of overlapping spaces with diagonal views, providing permeability and visibility to objects displayed at street level, while its roof itself becomes an extended green public space, a common ground between the city and the museum.

Similarly, the new National Museum of Art, Architecture and Design in Oslo (designed by Kleihues + Schuwerk Architects, 2022) and the State Museum of Fine Arts (MCBA) in Lausanne (designed by Fabrizio Barozzi and Alberto Veiga, 2019) are designed to connect to the existing street pattern [12] with the Museum of Contemporary Design and Applied Arts (mudac), located on the upper floors, and the Photography Museum (Photo Elysée), located on the lower floors. In this case [12], the space extends onto the public esplanade and is

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designed around another new museum building (designed by Manuel and Francesco Aires Mateus, 2022). Both museums share an open-space entrance that is a natural extension of the external esplanade. According to Tzortzi [12], this synergistic combination of buildings and open spaces aims to enhance the sense of urban density by linking the movement of visitors in and out of the museums with their paths within the museums. Another interesting example is the National Museum of Australia in Canberra, where we find not only the Garden of Australian Dreams but also the Christina and Trevor Kennedy Garden. Located in the forecourt, this garden features native Australian flora and bush tucker, presently acting as a tranquil entrance to the museum [13]. In this context, according to Keogh [13], the National Museum (established in 1991) should have been built within the Parliamentary Triangle in front of the old Parliament House, and a vast garden should have been the central unifying element of the building. This concept and location never came to fruition, but a decade later, the museum finally took up its site on the Acton Peninsula. Therefore, the Australian Dream Gardens were described as "the heart of the National Museum of Australia", a symbolic landscape that explores ideas of place and land, featuring water elements, creative landscaping, and light effects. This outdoor area surrounds the museum building, providing a magical backdrop for any evening event. Similarly, there is a focus on Luke Keogh's work at the National Museum which is to look at the medical and pharmacy collections and to show the important remedies that grow in Australian gardens [13].

For the Soulages Museum in France, RCR Arquitectes wanted to create architecture that is in harmony with the landscape. The team drew inspiration from a tree-lined boulevard and a topographical spine that overlooks the surrounding landscape and the mountains in the distance. For the new International Center for Cave Art in Montignac, the design team was tasked with creating architecture that would bring the prehistoric cave paintings of Lascaux to life. As the team explains, Lascaux IV was designed as a rift in the landscape. Lascaux IV is located in a transition zone between unspoiled forest and farmland. The Glenstone Museum was designed to fulfill its founders' vision of blending art, architecture, and landscape into a seamless experience. Located in Potomac, Maryland, the project includes a new 18,500-square-foot museum building called Pavilions, designed by Thomas Phifer. It also includes a 52-hectare landscape of rolling meadows, forests, and streams designed by Adam Greenspan and Peter Walker of PWP Landscape Architecture. For the team, integrating architecture and landscape into art was key to the Glenstone experience. Safdie Architects designed the Crystal Bridges Museum of American Art with inspiration from the surrounding landscape and context. The museum is located in a canyon on 120 acres of Ozark landscape, flanked by two hills. These slopes, which feature a network of trails leading to downtown Bentonville, are covered with mature oaks and dogwoods and topped with Arkansas white pines. From the outset, the team wanted to design a museum where art and nature could be experienced in harmony at the same time. One of the most iconic works of landscape architecture, the design for the Olympic Sculpture Park extends access to the Seattle Art Museum and the waterfront itself. The team created a continuous art landscape that forms an uninterrupted Z-shaped "green" platform that descends 40 feet from the city to the water. JKMM designed the Amos Rex Museum in the heart of Helsinki to blend landscape and architecture. The project consists of two parts: a new underground museum and the renovation of a 1930s-listed building, Lasipalatsi. The design team wanted to reimagine the city park as part of the museum experience. The structure consists of large concrete domes that allow for long column-free spans and flexible exhibition spaces [14]. The concept of a museum on Monte San Michele designed by the architect Alessandro Sacchet through the International Competition for landscape design and the indoor/outdoor museum design system of the San Michele Karst Area has the intention of returning to the community a space that has the history of the community, the memory of the events that took place, and the opportunity to explore and experience all of them together. The functional program involves a series of actions (replacing existing museums, creating a new museum, allowing natural light) that are part

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of a sequence of flows and paths. This enables the same thing to occur easily, at any time, from one environment to another, from one concept to another. In this endeavor, the new museum is not the focal point, but instead merges into the landscape. The goal was to take advantage of views of the skyline and Elliot Bay while expanding beyond existing infrastructure to reconnect the city's core with a revitalized waterfront [15].

Taking into account that gardens feature prominently in many museums, as they can serve as dramatic backdrops before entering the object-filled exhibition rooms, they can showcase a country's natural beauty and they can be a place for rest and reflection after touring a museum's rich exhibitions. The design of a museum garden is a very crucial issue, especially in the last few years, when museums (and galleries) have also played an important role in the discussion of horticulture, attracting audiences interested in landscape [13].

Furthermore, it is very important that architecture and landscape communicate with each other so that each practice can bring together materials, ideas, light, and form to bring concepts to life. At the core of landscape design is a deep understanding of process and time, while architects may seem focused on the final building or product. Both disciplines are intrinsically linked to the human experience. At the intersection of both practices are how we move through space, our views in and out, and our sense of connection to our surroundings and each other. This relationship is often projected onto the integrated connections between the building and the various elements within gardens and the external natural and cultural environments, such as the use of water, path accessibility, plant composition, productive areas, and building views, and is important to analyze and test whether these landscape factors are in a harmonious cohesion with the building [16–18].

As iconic buildings in the urban landscape [12], museums seek not only to mark places but also to create places and informal encounters by defining and utilizing a series of commonly used public spaces around them [19] or creating urban spaces within the building where visitor paths converge. It is widely acknowledged that Tate Modern has succeeded in creating "a very open space that can be activated by its users" [20]. The museum is surrounded by an informal landscape consisting of generous public spaces, large green embankments, and lawns. The idea is to transform the public space into a shared place, a natural space where people enjoy going, and, once there, are encouraged to explore what is happening inside the building. While it provides a collective sensory experience for visitors moving along the walkways and perceiving the surrounding urban landscape through the changing areas of color, it transforms the museum into a "beacon visible to the entire city", a "compass of time and space for citizens, and a "lighthouse" [21].

The idea of a "landscape museum" was born: one should go beyond the normative concept of the museum as an independent monumental building and create a kind of "exploded museum" in the region [22].

The current paper attempts to answer two research questions.

The first research question concerns protecting vulnerable heritage from the risks and excessive growth of cities, controlling conflicts between the dynamics of development and conservation, and facilitating the citizens' involvement in the implementation of the enhancement interventions.

The second question concerns the perception that the landscape design of an area of archaeological interest, whether it is an archaeological park or the outdoor space of an archaeological museum, is intended to be the pedestal for the narrative of the ruins and can be an infrastructure grid capable of connecting different components, but also spatial and cognitive sequences. An example is Solutré Archaeological Park (2012) by Catherine Mosbach, at Bourbon, located at the foot of Solutré Rock [23]. The park was built on the land where excavations are still in progress, characterized by a path not only to describe archaeological finds but also to describe the vegetation and landscape of the prehistoric age. Through a concatenation device, Solutré Archaeological Park sets up a dialectic between a natural site and a sensitive transcription of the different times of formations and appropriations. Visitors are taken by the hand through a memory of the place that is

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revealed by progressive sliding in a "ground-monument". The project interlaces different "dimensions" in a dialectical relationship: the natural dimension, with the spur of rock that results from ancient tectonic movements, and the historical dimension, which covers the long periods of geological formations in which fossil traces remain [23].

Except for the archeological parks, the museums with their gardens are areas where we should have a deeper conversation. Museums are places of play, creativity, and learning, and their vast collections also house an archive of our gardening past. They can provide the perfect way into garden history, which is why they date back so far: the perfect way, now, of many ways in a huge resurgence in gardening. People are coming to realize that the garden can not only be a place where we work with nature but also the site where various experiments can take place toward a sustainable future. They are curious. Indeed, welcoming an enthusiastic garden-loving public is not only the remit of botanical gardens, but onsite museums (and galleries) do have a very important role to play in this conversation. Many museums have not only huge outdoor gardens but also huge collections to show in their exhibitions. As museums transition from a place of curation with large collections to places of engagement and connection, garden histories offer many opportunities to museums nationwide [13]. Gardens can have aesthetic, historical, and scientific beauty; they can also be educational and ecological. As a result, they are typically associated with museums, which aggregates the diverse subject matter that our field concerns. Some museums are gardens, and many more operate gardens of a specific type. From sprawling outdoors to serene sculpture parks to lush rooftop oases, our institutions have a variety of options available to them, and these options are dependent on the flowers (or other plants, or rocks, or larger sculptures, etc.) [24].

Taking into account the importance of the gardens of the museums and the way that their design can be related to the museum design, the current research is based on the landscape design prepared by the author for the New Cyprus Archaeological Museum, submitted as part of the proposal for the International Architectural Competition that was called by the Ministry of Education and Culture of Cyprus [25]. This paper emphasizes the design of the museum garden as an area of cultural and educational activities, as a link and path to Greek antiquity and mythology (where each plant was sacred to a god/goddess) and its symbolism, as a place of education, open to aerial activities, memory, performance, identity and intangible art. The purpose of the landscape design of the museum is to create practical, productive knowledge that alters or improves reality which is accomplished through the use of exploratory models that combine the processes of research and design.

The proposed design strategy seeks to shape the concept of a landscape museum, with a special role played by new "landscape-themed spaces", where six thematic areas are metaphorically and physically connected to the exhibition spaces of the real museum. The area surrounding the museum is therefore conceived as an open-air exhibition space, extending across the urban fabric, where archaeology and landscape are interwoven into a unified narrative, both physical and virtual, and also through any event that can take place in the new inclusive archaeological "space".

1.2. Methodology

As it is acknowledged the Museums are cultural institutions that bring together history and context with material expression and accompany the visitors in their journey.

In this article, as a case study prepared by the author, the landscape design proposal for the New Cyprus Archaeological Museum was submitted to the International Architectural Competition in 2017. The proposal links the museum garden with the building, merging the history and culture into the garden routes. Furthermore, the garden, together with the surrounding area of Pedieos River, contributes significantly to the increase in Nicosia's green spaces and greenways. In fact, a part of the Museum Garden is proposed as a public garden.

In this paper, there is a systematic investigation using the scientific method of surveying the area (by collecting information from site visits, bibliographical research of the area

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and the general theme, and interviewing the archeologists of the existing archeological museum of Cyprus), analyzing the surrounding area of the museum, and collecting information and exchanging ideas with the whole design group of the International Competition to obtain knowledge or contribute to knowledge in the landscape design of museums (see the graph in Figure 1).

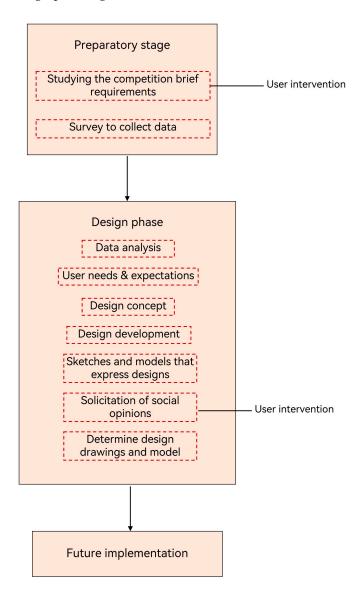


Figure 1. The methodological diagram.

The method that is followed is "research-based design", a method that is used quite often in landscape architecture and refers to a particular heuristic (way of knowing) or research strategy [26–30]. In this context, "strategy" refers to working in a well-considered manner to achieve a particular goal. According to Nijhuis and Bobbink [31], "research-based design" is a combination of research into and through design (which they call design research and research-by design) that starts with analyses of existing designs or designed landscapes and leads to "experimental design study" and design in a knowledge-collecting procedure, while Jansson et al. [32] mentioned that research-based knowledge has an important role to play within landscape architecture and can be used to strengthen and improve design work.

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Therefore, following the "research-based design" method, the results of the research are the landscape design of the Archeological Museum of Cyprus, and can be validated and replicated in similar case studies using the same design criteria.

The competition design team consisted of Julia Nerantzia Tzortzi as Landscape Designer (the author of the current paper); Marco Visconti and Giorgio Mare, Architects, who dealt with the Architectural Design of the Museum; Anastasia Sali-Papasali, Professor of Museology at Ionian University (Greece); Luca Bombardieri, Associate Professor in Aegean and Cypriote Archaeology at the University of Siena (Italy), who dealt with the Musicological part; Carlo Castiglioni, Professor of Structural Engineering at Politecnico di Milano (Italy); who dealt with the structural part; and Davide Luraschi, Fire Safety Expert, who dealt with the Safety design. In this case, the total Architecture and Landscape proposal studied all the aspects by the interdisciplinary design team, as can be seen in Tzortzi and Visconti [25]. The paper presented by Tzortzi and Visconti [25] dealt with the total Architecture proposal of the museum and briefly referred to the landscape. During the Architectural Competition as mentioned above, several specialized scientists worked on that, as it was also requested in the brief, and it was proven that the interdisciplinary approach offered all a unique opportunity to work and think together, as was suggested by Alday [33] in the chapter 'From Disciplinary Fields to Interdisciplinary Challenges: Shifting the Focus of Architectural Education', where the importance of collaboration and complementarity is mentioned in the design of architecture and landscape architecture.

This methodology (RTD) began with the preparatory stages, which included a survey that collected data on the site (primarily via recording the current state of affairs, as sun path, sunlight, and ventilation, as well as the trees and shrubs in the area and the surrounding area) but also via internet and historical research and data collected from other case studies. This information was then compiled and provided to the users (primarily via interviews with the archaeologists of the existing archaeological museums). During the design phase, the collected data were discussed with other disciplines (along with the other archeologists, museum-goers, and architects in our group) to create the design concept. Additionally, more detailed sketches and proposals were created through the process of design, asking for social opinions, and creating drawings and proposals (Figure 1).

The concept of the landscape design stemmed from the gardens of Ancient Greece and mythology; the focus was on the inventory of sites recorded through descriptions and narratives in written passages, as well as the bibliography of relevant material.

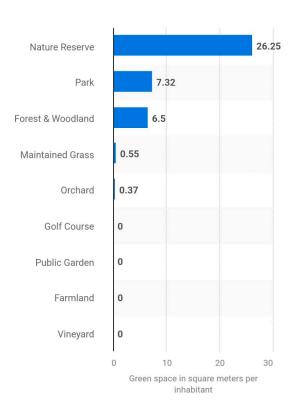
The research method that was followed can be adapted and replicated, as mentioned by other scientists, and is related to the scope of the paper especially in the design of the landscape of a surrounding building connected to the historical representation of the founding material, especially in the case of archeological and other kinds of museums.

The design of the landscape has led to the creation of a new park area that is publicly accessible; this has led to an increase in the total green space area of Nicosia, which is currently at 7.32 square meters per capita (Figure 2) [34].

Additionally, the orientation of the sun has been taken into account and is recognized to have a significant impact on the architectural and landscape design [35–39]. As a result, this investigation carries out an evaluation of the shade in the city of Nicosia utilizing the sun-path diagram (Figure 3).

Additionally, the design emphasizes how it can be extended from the museum's galleries and exhibition areas to the landscape design. This will continue at multiple scales and areas; the interior and exterior of the space will be explored in addition to the museum's interior and exterior.

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Figure 2. Green areas in m² per inhabitant in the city of Nicosia in Cyprus in 2018 Source [34].

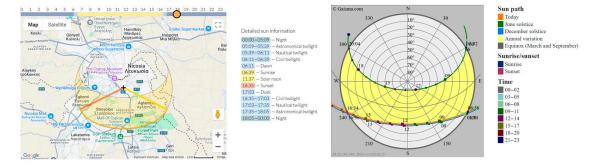


Figure 3. Sun direction in Nicosia on the left, source [40], and Sun Path diagram in Nicosia on the right, source [41].

2. The Case Study

Description of the Site

Cyprus is an island located in the Eastern Mediterranean region at 35° north and 33° east. Cyprus has a typical temperate Mediterranean climate characterized by mild humid winters and hot dry summers. The summers last from mid-May to mid-September, and the winters last from November to mid-March; autumn and spring seasons are short with rapid changes in weather conditions [42,43]. The Nicosia district is the capital of the island, with the largest resident population of 351,600 (38%) (Census 2021) [44], and the location of the study is (Figure 4) the capital city of Nicosia (the last divided European Capital).

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Figure 4. The location of the New Archaeological Museum in Nicosia, Source: modified by the author from Google Earth.

According to Theophilou and Serghides [45], the temperatures in the Nicosia Center, where the site is located, are typically higher than the ones in the Athalassa area (which is the peri-urban forest). During the summer season, June–August, the temperature difference is 5% greater in the Nicosia city center. Furthermore, this research proved that the Urban Heat Island effect is present not only during the summer but also during the winter in Nicosia city center.

To be more specific, the site is located in the center of Nicosia where the old General Hospital used to be, near the current Archeological Museum and the Venetian Walls, the latter of which is Nicosia's old city situated near the Pedieon River, the Municipal Park (Figure 4), and the House of Representatives (Figure 5).

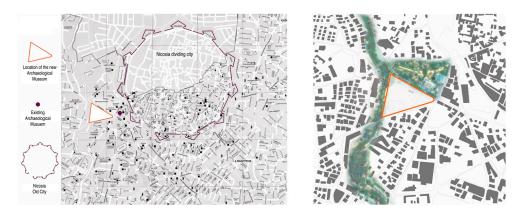


Figure 5. The location of the Nicosia Old City surrounded by the Venetian Wall and the location of the New Archaeological Museum and the Old Museum (**left**), and the new museum area, adjacent to the Pedieos river, which is in the form of a linear park, and the City Gardens (**right**). Source: modified by the author from Google Earth.

The specific site where the new Cyprus Museum will be built according to the brief of the competition (Cyprus Architects Association): "the new museum site will become a cultural destination for local and foreign tourists, by highlighting the antiquities collection and offering to the visitors a unique opportunity to travel through time to understand and study the history and rich ancient culture of Cyprus" [25].

Therefore, the new museum attempts to instill a unique reputation in its vicinity, creating a new, powerful cultural destination in the larger area of the city's cultural quarter, attempting to strengthen its bond with the existing Old Museum, as well as the other public buildings in the vicinity. The existing surrounding public buildings were constructed with the amalgamation of past (the existing museum, the municipal theatre) and present (the House of Representatives, the Theatrical Organization of Nicosia, the Ministry of Finance) in the architecture of the city, from historic landmarks to the evolving nature of modern buildings of Nicosia's architectural landscape. Also, as already mentioned, the site is adjacent to two important green areas of Nicosia: the Pedieos River, which is formed as a linear park with a walkway along the river; and the Municipal Gardens (Figure 6), which is a park established in 1969, right behind the Parliament building, equipped with playgrounds, a cafeteria, fountains, and walkways that are fully renewed.



Figure 6. The site where the new Cyprus Museum will be built is the old General Hospital (SITE) next to the existing museum, which is a neoclassic building (3);, the House of Representatives, which is a modern building (1); and the Municipal theatre (2); and close to the modern buildings of the Theatrical Organization of Nicosia (6) and the Ministry of Finance (7). As for the landscape, the SITE is adjacent to the Pedieon River, formed as a linear park (5), and to the Municipal Park (4). Source: google map modified by the author.

3. Design Proposal

3.1. The Architectural Concept

A subliminal presence of historical culture upon architectural form is one of the prominent aspects of our project. As a result of this intention, the building represents an organic whole, driven both in plan and facade from the reminiscence of three well known historical elements (Figure 7) [13].

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Figure 7. Cypro syllabic script image used as a metal sheet perforating pattern. Source: Mary Harrsch, Bichrome Pitcher Cyprus Archaic Period, photographed at the Los Angeles County Museum of Art, Los Angeles, California. Source: Tzortzi, Visconti [22].

More specifically, the shape of the museum's curvilinear footprint repeats one letter of the ancient Cyprian alphabet, ancient Cypro syllabic script (Steele, 2013), while its urban volume recalls the nearby fortified wall's diamonds, and the sinuous pattern of outer sun protection evokes the concentric ancient geometry of iron age painted pottery (Figures 7 and 8) [25].

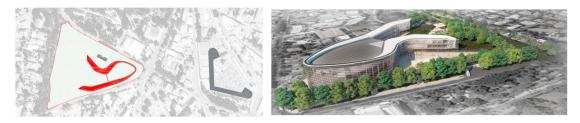


Figure 8. The urban volume recalls the nearby fortified wall's diamonds for the lower sheltered facade of the building, providing both natural sunlight control and burglar-proof safety. Source: Tzortzi, Visconti [22].

This curvilinear envelope, drawn in a "crescent" shape, as well as natural lighting, are the main design features of the proposal (Figure 7), which integrates building and landscape architecture, as well as indoor and outdoor spaces into a unified concept [25].

On the façade of the building, digital 3D prints scenically displayed on the main entrance (Figures 9 and 10), reproduce the Agia Irini clay statues [46], which is the collection that is currently housed inside a multilevel exhibition space of the existing archeological museum; together with visitors' amenities, this represents a comprehensive picture of human presence in Cyprus.

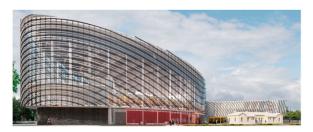


Figure 9. Concentric circle geometry projection on complex building facade surface generates solar shading tubular element pattern. Source: Tzortzi, Visconti, [22].



Figure 10. Agia Irini clay votive figures, 6th–7th century BC, Cyprus Museum, Nicosia, Source: Tzortzi, Visconti [22].

The visitor's route is a three-dimensional loop, going up from the lobby to the exhibition levels by overlapping stairs. Two lateral wings, designed as a natural completion of the main glazed volume, host administrative offices, conservation laboratories, the Department of Antiquities, and the library, while the underground floor contains store rooms, a conference hall, and a car park [25].

Based on the sun-path diagram of Nicosia (Figure 3), Figure 11 shows that during the spring, summer, and autumn seasons, the north side facade is shaded by the building's own shape and orientation, and therefore it is just protected by shading from sunlight. The whole south façade, and partially the east and west ones, are treated with highly efficient sun shading material due to direct sun exposure. The sun-path diagram showed that the open-air area is mostly exposed to the sun. The landscape design proposal is strictly related to that.



Figure 11. Sun-path diagram and solar shading evaluation, Source: Tzortzi, Visconti [22].

3.2. The Landscape Design Proposal

Landscape design is an expansion of the interior exhibition spaces (Figure 12) and gives an identity to exterior areas.

By recalling the island's original natural environment, the landscape design proposal embodies a theme that runs central to the exhibition and architectural concept: returning to a native place.

The natural and spiritual elements give a strong symbolic meaning to the landscape design.

The design composition consists of a dual architectural form, and the overall composition seems to successfully integrate the two aspects, as one emerges from the other (Figures 12 and 13):

- Symmetrical—formal, determined by the expressiveness of the museum building that dominates the site;
- Asymmetrical—organic, dominated by a network of sinuous paths that fit perfectly with the existing surrounding landscape of Pedieos River and guide visitors towards the building, also cooling and shading the surrounding area from the sun exposure.



Figure 12. The landscape design of the museum is an extension of the inner exhibition spaces while the olive tree (*Olea europea*) was used in specific places as the tree of the goddess Athena in the proposed 'Olive Grove'. Source: Tzortzi, Visconti, 2024 [22].

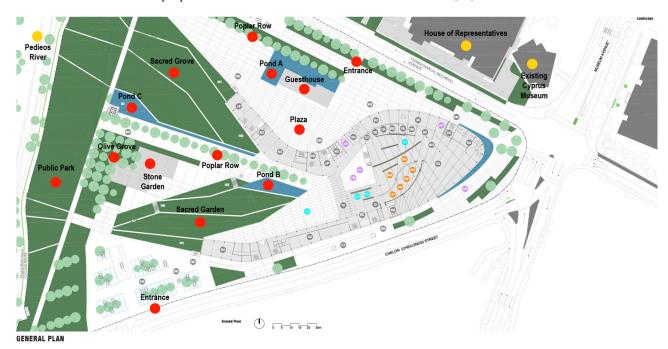


Figure 13. The general ground plan of the museum, including the planting scheme of the external gardens. Source: Tzortzi, Visconti, 2024 [22] modified by the author.

There are two main entrances into the proposed Museum area which depict the double meaning of the proposed landscape scheme (Figures 13 and 14):

- A monumental plaza that becomes the main entrance of the Museum, aligned to the Museum Guesthouse, close to the House of Representatives and the existing museum.
 The connection with the existing museum is proposed to be done with an optional Underground Link;
- A second entrance (connected also with the Car Parking and the Underground Parking for the museum staff) that is characterized by its informal design.

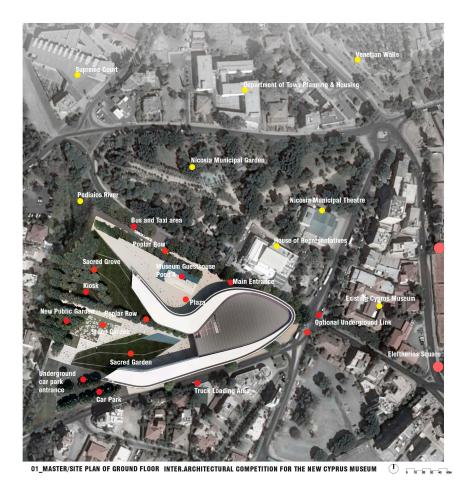


Figure 14. The proposed areas in the landscape of the museum. Source: Tzortzi, Visconti, 2024 [17] modified by the author.

The monumental plaza is situated to the north of the site and is conceived to create a gradual transition from a mundane to a spiritual atmosphere. Along this plaza, there is also a historic building, the remainder of the hospital complex, which will be preserved within contemporary conservation standards and monument values and reused as a Guesthouse (Figures 8 and 9) for the museum visitors and researchers.

The surrounding landscape of the Guesthouse was designed carefully by highlighting the historical significance of the building in a more formal way (e.g., fountains, rows of trees), while the whole design elements follow several symbolic meanings of mythology and Ancient Greece, as, also, all the garden does.

Therefore, right in front, and on the northern side, of the Museum Guesthouse, there is the major water feature (Pond A) (Figures 13 and 14) of the Guesthouse, providing cooling to the atmosphere for the visitors. This formally shaped water element is designed to symbolize "an altar to the nymphs", as it is stated in Homer's Iliad [47]. In parallel with this water feature is proposed to be planted a row of poplar trees (*Populus alba*) that symbolizes the "grove of water-loving poplars planted in a circle all around it..." [47]. This row of poplar trees provides cooling during the summer, while, during the winter, allowing the sun to go through and create a pleasant and warm environment while reducing the ground winds effectively.

A similar row of poplar trees is proposed also to be repeated in the courtyard of the museum between the two other water features of the museum (one in the center of the courtyard—Pond B—and the other in the northeast of the courtyard—Pond C). The water feature that is proposed in the center courtyard (Pond B) symbolizes the Aphrodite bath since it is believed that the Greek goddess of love was born from the foam ("afro" in Greek) of the Cyprus sea ("dity", whose Greek meaning is "coming out from the sea"). Around this

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water feature proposed by the author will be planted common myrtle (*Myrtus communis*). In Ancient Greek mythology, the "brides wore myrtle-garlands and bathed in myrtle-scented water on their wedding day" (Figures 13 and 14) [48].

Next to this water feature proposed by the author is a garden called the "Sacred Garden". This symbolizes a special place in Cyprus called *Hierokepis* or *Hierokepia* (whose Greek meaning is "Sacred Gardens"), dedicated to Aphrodite. The lush vegetation brought with it connotations of sexuality and fertility, as well as concepts associated with sacred marriage. Furthermore, the Greek word kepos (garden) is sometimes used metaphorically to mean "vulva"—not surprising, as the female body is often linked to the earth [49].

The plants proposed to be planted at the "Sacred Garden" (Figures 13 and 14) are mainly shrubs or small trees that are devoted to different gods/goddesses, as usually happened in Ancient Greece [48]: Juniperus oxycedrus, sacred to Artemis (there was a sanctuary of Artemis Kedreatis); Vitex agnus castus, sacred to Hera (assoc. with marital chastity); Laurus nobilis, sacred to Apollon (the victors of his Pythian Games were crowned with wreaths of laurel); Commiphora myrrha, sacred to Aphrodite (festal myrrh incense); Punica granatum, sacred to Hera (the fruit was her attribute as the goddess of marriage—the bloody red seeds representing female fertility); Cistus villosus, sacred to Poseidon; Lilium candidum, sacred to Persephone; Mentha spicata (or viridis), sacred to Demeter and Persephone (the sacred barley-drink of the Eleusinian Mysteries was flavored with mint), Narcissus tazetta, sacred to Narcissus; Rosa gallica, sacred to Aphrodite; Vitis vinifera, sacred to Dionysos (god of wine and viticulture) [48]. Also, this area is surrounded by Acantus mollis, the plant that is represented in the Corinthian columns (Figure 15) [50].



Figure 15. The main plants of the Sacred Garden. Source: Author.

Immediately next to the "Sacred Garden" is the "Stone Garden" (Figures 13 and 14), with natural white stones of the seafront of Cyprus recalling the natural pebbles of the seafront landscape of Cyprus such as the Aphrodite Rock area (Figures 16 and 17). The stones will be used either as a playground area or as a sitting area for the cooling season. Also, many tourists (coming from North European countries) prefer to stay under the sun even in the warm period in Cyprus. In any case, the 'Stone Garden' is partially shaded by

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the trees of the "Sacred Grove"; therefore, visitors who prefer to stay under the shadow during the warm period can stay protected under the tree shade.

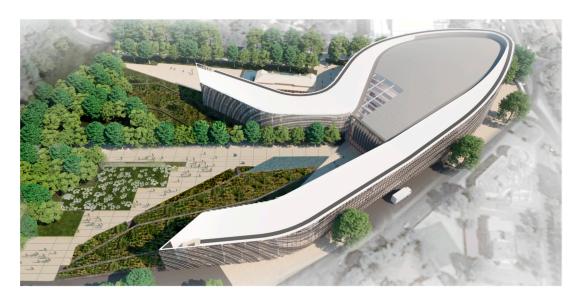


Figure 16. The "Sacred Garden", the "Sacred Grove", the linear water and the "Stone Garden" with large pebbles. Source: Tzortzi, Visconti [22].



Figure 17. The "Sacred Garden", the "Stone Garden", and the row of the poplar trees (*Populus alba*) further back. Source: Tzortzi, Visconti [22].

Nearly next to the Stone Garden, there is the "Olive Grove" (Figures 13 and 14), in a grid system layout because the olive was the most important tree of ancient Greek horticulture. The fruit was used as a relish with bread, its oil employed in cooking and for lamps, light, and as lotion for the skin and hair. The olive was sacred to Athena (the most sacred olive grew in her sanctuary on the Acropolis of Athens) and to Zeus (victors at the Olympian Games were crowned with wild olive). Even in ancient times, the Greek word *kepos* (garden) meant "orchard" and was used metaphorically for land rich in agricultural products [51].

Directly next to the third water feature (Pond C) (Figures 13 and 14), which has a long and narrow rectangular shape, with water jets for cooling the atmosphere, is proposed to be planted woodland that will symbolize the "Sacred Grove" associated with the one of ancient Greece. Indeed, the "Sacred Groves" of ancient Greece were aimed specifically to connect the divine realm of the gods and the secular world of humans. Generally speaking, "Sacred Groves" in Ancient Greece marked an area with connotations of escape, invulnerability, protection, and separation from the outside world—the root word "Temenos" means "to

cut off" or "to separate" [52]. However, the "sacred groves" not only fulfilled religious duties, but also provided practical functions, such as shade, cooling, and sometimes even fruits and other tree products [53].

The proposed "Sacred Grove" in our case is associated with the Museum's outdoor spaces but also with the Pediaios River flowing in the north–south direction on the west side, creating a continuity of the green areas of Nicosia. Additionally, during the hot days, the visitors can sit under the shadow of the trees and follow the proposed serpentine paths that lead through to an open recreational space within the central courtyard.

For the "Sacred Grove" in the research that is based on the landscape design prepared by the author, the proposed tree species are sacred to certain gods, such as *Pinus brutia* to Poseidon (victors at the God's Isthmian games were crowned with wreaths of pine); *Prunus amygdalus* to Attis (born of the almond nut); *Ficus carica* to Demeter and Dionysos; *Diospyrus lotus* to Priapos; *Cupressus sempervirence* to Artemis (sacred cypress groves); and *Quercus* sp. (Oak tree) to Zeus (Figure 18) [54].



Figure 18. The main plants of the "Sacred Grove". Source: Author.

The southwest part of the garden is proposed as an open park named the "Public Park" that directly ties to the Pedieos River that is already part of a linear park.

This part is proposed to be planted with Cyprus species, taking into consideration the well-known rich biodiversity [55–58]. This is also attributed to the varied geology and geomorphology of Cyprus, as well as the small-scale temperature and precipitation fluctuations in the island [59]. Additionally, the island's location on the eastern Mediterranean Sea is at the meeting point of three continents, which makes the island significant. The route of migration is not only employed by humans but also by flora and fauna species. These factors, along with the long history of the island, have led to the creation of a rich and unique biodiversity that is similar to the most diverse areas of Europe; this is called the island's richness.

Indicatively, 48 different habitat types of the European Habitats Directive (92/43/EEC) have been recognized in Cyprus, of which five are located entirely on the island. It is documented that Annex I includes the natural habitats of communities that have a conservation priority; these habitats should be considered special areas for conservation. The diverse array of habitat types fulfills the specific requirements of numerous plant species. To this point, approximately 2000 species have been recorded in Cyprus, of which 145 are native to the island. Many species of plants in Cyprus are considered uncommon,

primarily the indigenous species; their populations are small, and they are few in number. The survival of many of these species is currently threatened by external forces, such as the human-induced pressure to industrialize and urbanize. During the past decade, these forces have primarily been augmented, primarily due to changes in agriculture (the extensive use of pesticides and fertilizers) and the rapid increase in tourism, the expansion of the mountainous road network, the urbanization of large natural areas, and the development of various activities within natural areas (military activities, stone quarrying, golf courses and more).

Therefore the "Public Park" is proposed to be planted like an Educational Park where four Cyprus habitats are proposed that can be grown in the climatic and the altitude of Nicosia [60,61] as below:

- Coniferous Forest is dedicated to the planting of *Pinus brutia* (Calabrian pine) and *Cupressus sempervirens* (Cyprus tree).
- The oak forest is characterized by the presence of the Cyprus oak, which is a type of tree that is typically found in Mediterranean climates and is represented by small clusters or individual trees. The trunk and the decayed wood of *Q. infectoria* are considered the primary habitat of an endangered species of beetle, *Proomacrus cypriacus*. Also, it will be planted with the Endemic Cyprus golden oak with *Quercus alnifolia* that is common in Cyprus and the National Tree of Cyprus [62,63]. Additionally, the research of Kougioumoutzis et al. demonstrated that, regarding *Quercus alnifolia* (Figure 18), the climate and land-use changes are significant dangers to the species' survival [64].
- Riparian forests and thickets will be situated along the Pedieos River in conjunction with (a) Galleries that are built with *Salix alba* and *Populus alba*, which are common in Cyprus; ad (b) Oriental plane trees, which are typically found in mixed stands with eastern plane trees, which are the most common type of riparian forest in the country. Other species that are typically arboreal include *Salix alba* (White willow), *Alnus orientalis* (Elder), and *Ulmus canescens* (Grey-leafed Elm); (c) Thermo-Mediteranean galleries with *Nerium oleander* (Oleander), *Tamarix* spp., and *Vitex agnus-castus* (Chaste Tree), grown in riverbeds and on riverbanks that have a periodic or occasional nature that is characterized by long periods of dry weather. They are the most common type of riparian forest vegetation and are present on the entire island.
- Mediterranean shrublands—matorral: The most common type of habitat in the Mediterranean shrublands is the low (typically 0.6 m), pillow-shaped, thorny phrygana plants that occupy the driest areas, or areas with poor soil. As a result, the most significant species will be planted; these are *Sarcopoterium spinosum* and *Coridothymus capitatus*, and they have multiple associated species, including *Helianthemum obtusifolium*, *Onosma fruticosa*, and *Teucrium mi-cropodioides*. Despite being common on the island, the tall (at least 2 m) and dense olive and carob trees are the most uncommon in the shrublands. Representative species of this habitat are *Olea europaea* (olive), *Ceratonia siliqua* (carob), *Pistacia lentiscus* (pistachio), and *Quercus coccifera*, (Kermes oak), and the endemics (e.g., *Bosea cypria*, *Trifolium pamphylicum var. dolichodontium*, *Genista fasselata var. crudelis*, *Centranthus calcitrapa* subsp. *Orbiculatus*, *Cyclamen cyprium*, *Limonium cyprium*, *Hypericum repens*, *Sedum cyprium*, *Teucrium cyprium*) (Figure 19); also, the scrubs *Ziziphus lotus*, *Laurus nobilis*, *Genista fasselata*, *Juniperus phoenicea*.

Furthermore, the tree species that is proposed to be planted in the area is the endemic *Quercus alnifolia* (golden Oak) (Figure 18), which is the national symbol of Cyprus, and therefore widely used in the landscape design on the island. The "Public Park" is also expected to attract birds and other wildlife.

As for the endemic and other indigenous plants proposed for planting but not available in private nurseries, they are planned to be sourced through close collaboration with the Forestry Department. The department is already engaged with the Athalassa Botanical Garden, located in the peri-urban area of Nicosia. This garden hosts 600 plants, primarily originating from the island's native flora, representing 290 different species and subspecies across 167 genera and 79 families. Most of the plants have been produced at Athalassa

Forest Nursery since they collected seeds and reproduced the plants. The nursery is located next to the Botanical Garden [65]. This is simple from the perspective of the administration, because the New Archeological Museum is a public building and the Forestry Department is a public administration under the Ministry of Agriculture, Rural Development and Environment, which is responsible for maintaining the public buildings. Therefore, the plants for the Garden of the New Archeological Museum can be produced in the Athalassa Forest Nursery. This will be achieved by collecting seeds and growing them in specific conditions in the nursery, where specific growing methods are being used. This action will result in plant propagation. Two years later, these plants will be able to be planted in their final location, which is the garden of the museum. Following an interview and visit to the Forest Nursery of Athanlassa (Nikosia) in Forestry Department, it has been noticed that it is already successfully growing the endemic species such as Bosea cypria (has a high rate of success) as well as Scabiosa cypria, Mantisalca salmantica, Centaurs acamantis, Sideritis cypria, Tulipa cypria, Rosa Chionistrae, and also several other species that are typical of the island and described above in the four Cyprus habitats proposed. Taking into account the specific types of habitat protected by the European Habitats Directive, the reproduction of the plants strictly will be done with seeds that will be collected.

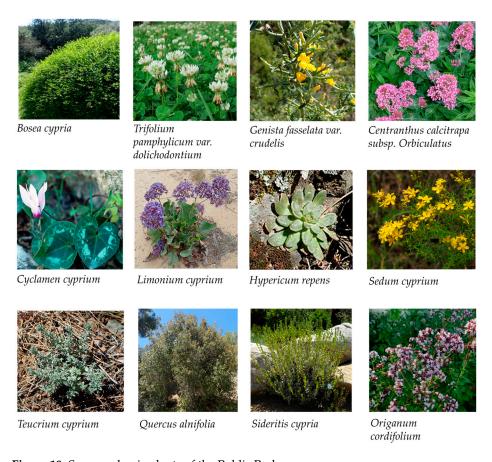


Figure 19. Some endemic plants of the Public Park.

Furthermore, the "Public Park" incorporates the experience of a Park Walk, where trails resemble woodland paths. The various vegetation types vary in height and composition, scattered in a mosaic-like pattern, shaping the boundaries of the space.

It is believed that the landscape design prepared by the author for the New Archeological Museum Garden will give an educational character since it is proposed to label all the plants with their scientific names and to give also a short description mentioning mainly to which gods/goddesses they are sacred. Interpretive signs explaining the directions and the main context of each "Theme Garden" are also planned to offer interpretations, especially

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useful for individual visitors in a museum; therefore, guides are not always necessary. In this way, the surrounding landscape of the museum will be an "outdoor museum" with important information on plants, mythology, and, in general, on the "Theme Gardens".

Additionally, the establishment of the green areas around the Archeological Museum will also increase the total green area of Nicosia to $0.04~\text{m}^2$ per person bringing the park area from the existing $7.32~\text{m}^2$ per person to $7.36~\text{m}^2$ per person and this will also have a positive effect on mitigating the Urban Heat Island Effect in Nicosia.

It's expected that the temperature in the vicinity of the museum will be reduced by 2–3 °C during the summer and increase thermal comfort, similar to the research conducted in Greece in Thessaloniki [66] and Chania (Crete) [67], where the temperature of the air was reduced and the thermal comfort was increased in the central portion of cities that were planted with trees, and specific measurements were taken. Also, it is expected to further reduce the temperature in the proposed "olive grove", "sacred grove", and "public garden", where, according to Loyde Vieira de Abreu-Harbicha et al. [68], the air temperature decreases by 0.2 °C to 0.8 °C for single trees, and by 0.3 °C to 15.7 °C for clusters of trees during the day (10:00 a.m. to 2:00 p.m.). This would enhance the thermal comfort of the outdoors, diminish the effects of heat islands, and guarantee a better quality of life for people in the urban environment [69–72].

Moreover, the new museum's hard landscaping materials include light-colored ceramic paving and white roofing materials to reduce or avoid temperature increases and white pebbles as already mentioned, and the paths are from stabilized earth, thereby improving environmental, air quality, and the urban heat island condition. According to Souza [73], while darker materials absorb up to 95% of the sunlight's rays, they release these photons directly into the atmosphere; this percentage can be reduced to 25% with a typical white surface. Therefore, with the "The Coolest White" proposed hardscape materials (white ceramic pavement and pebbles/stones), the absorption and emission reductions are 12%, according also to Souza. Furthermore, for the most extreme of solar irradiation, the highest recorded temperature was for black granite, which reached 68 °C, while the lowest recorded temperature was for white ceramic, which reached 45 °C [74].

In addition, the parking lot is paved with permeable concrete, allowing rainwater to be directly returned to the site's groundwater system. Exterior lighting is designed to not cause light pollution and meet LEED "dark sky" requirements, adopting some of the best strategies to reduce light pollution [75]. Two large cisterns collect rainwater from the museum's roof to irrigate the entire museum grounds, according to Jarret's research [76]. In Cyprus, the sun is present year-round and the museum's solar array is expected to include solar panels and aims to provide more than 25% of the energy needed to power the museum, according to Hamed et al. [77]. All these are proposed to enhance the sustainability of the new museum and its surroundings.

The design method might be replicated in other similar cases not only concerning archeological museums but also other kinds of museums where the surrounding landscape of the museums can be used as an open-air exhibition.

Also, the material of the building is relevant to understanding such an integration, and it responds to the specific needs of museum facilities (luminance control, museography, and project installment), and the arrival of the visitors into the landscape that is choreographed through the trees and open fields, heightening their experience with the land and revealing the subtle qualities of the site. From the first moments, the visitors experience a place with few distractions, and their minds and souls prepare for an intimate encounter with archaeology, art, and culture. The public then circulates from the museum building to the gardens, crossing the water elements with open vistas or "plaza" all around. From the guesthouse, the pedestrian route descends to the water, linking four new archetypal landscapes: a "sacred garden", a "stone garden", a "sacred grove", an "olive grove", and finally the "public park" with Cypriot endemic species.

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4. Discussion

The results highlight the importance of landscaping in the new Cyprus Museum and the various "Themed Gardens", with a layout that provides continuity between interior and exterior design. The thematical gardens that are proposed in the design can affect the user's experience, as Shahrad mentions [78], while some specific features in the garden are attractive to the visitors, like the water fountains, as also mentioned by Lau et al. [79]. The symbolic meaning of the plants connected with those from Ancient Greece, which Rizopoulou mentions [80], gives a specific meaning and theme to the garden, while the signs in the garden that give explanations about the "Themed Gardens" and the vegetation could encourage people to touch or smell specific plants, according also to Harries et al. [81]. Additionally, within the planting theme, the use of wild and local flora was proposed, which also, according to Douglas et al., can provide a sense of place and positive emotional benefits and encourage local biodiversity in the garden [82,83]. This will also encourage birds and other wildlife into the garden, which will help create a feeling of serenity [81].

The proposed "Thematical Gardens" can be also applicable to other cultural buildings and landscapes. Within the key argument presented in the paper, it can be seen that, as the role of museums in society changes, together with landscape concepts and garden design approaches, museum architecture and urban design are changing with them. The case study discussed in the paper illuminates some of the different ways in which museum landscape architecture can highlight space to express the inclusivity of the museum. Through such landscape architectural devices as spatial and visual connections to and from the city, and social spaces and urban layouts within and adjacent to the museum, it can create museum approachability and openness, shape an informal landscape that encourages random patterns of exploration, and foster visitors' sociability. Museum landscape architecture can also provide the intelligible framework to facilitate choices and give visitors the power to select among different narratives, perspectives, and types of experience that co-exist in parallel. It can communicate the idea of cultural connectivity; provide the stage and the means for experimenting with novel ways of presenting art and cultural heritage and new forms of visitor engagement; and generate situated meanings and experiences created for that specific time and space, which aspire to bring to the museum exterior the urban culture with its diversity and experiential dissonance, and so allow for inclusiveness.

Also, the two research questions have been answered through the project. Firstly, the landscape design enhances the protection of the heritage vulnerability from the risks and excessive growth of cities by offering an extra green area, increasing cultural awareness, and controlling the conflicts between the dynamics of development and conservation, and facilitating the citizens' involvement in the implementation of the enhancement interventions. This can also be successful through several events that can be introduced in the garden of the museum and also through the information that will be given via the museum's garden labels and information signs.

The paper also answers the second research question, which is, how the concept of the landscape design of an area of archaeological interest—as it is the surrounding area if the archaeological museum—can be the pedestal for the narrative of ruins and can be part of the green infrastructure network of the city capable of connecting different components, but also spatial and cognitive sequences.

Additionally, the author answered the question of how landscape meets architecture by developing the issue of public use of the landscape with the creation of different "thematical open rooms" related to ancient times, such as "sacred garden", "stone garden", "olive grove", "sacred grove", "public park", "plaza"). Furthermore, the landscape design of these areas aimed to return them to citizens so they can become spaces to be used for events like cultural events or other initiatives, transforming them into public spaces immersed in the landscape that are valuable as cultural stages of itineraries and multi-experiential tourism, in full respect of the historical matter. The proposed interventions enable the preparation of spaces where the landscape design can be experienced, understood, and wandered. This creates a clear and constantly renewed perceptual experience of discovery, based on the

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respective location, and gradually reveals its historical and naturalistic dimensions in a continuous dialogue between past and present.

Another advantage of this strategy is the consideration of temporality within the project. Due to the nature of the site, some of the archeological exhibitions are temporary and are not fixed, but constantly changing, subject to changes and unexpected discoveries, which require constant investigation to unveil the site. Therefore, the project cannot be seen as one that begins and ends at a precise point in time, but rather as one that is "open" to new possible problems and future needs, to new possible and unpredictable themes following possible archaeological discoveries, to reversibility and flexibility in the intervention.

The feasibility of the interventions was also a criterion that was strongly influenced by the architectural and strategic decisions. The essence and narrative innovation of the new building were key concepts in the design action, from the regional scale to the landscape and to the architecture, fully respecting the old material of the existing building that is maintained, and its landscape context, and strengthening the strong relationship between them.

The topics covered, operational guidelines, and proposed design solutions have been identified and developed so that they can also serve as generic, replicable, and applicable guidelines for other museum projects in Cyprus and in the rest of the Mediterranean.

Methodologically, from the investigations carried out to the definition of strategies, common problems and specificities of the various museum sites were identified to develop several answers that take into account heterogeneous conditions. The six thematical areas ("sacred garden", "stone garden", "olive grove", "sacred grove", "public garden", "plaza") studied within the framework of the draft project proposal were studied in an integrated, multi-scale, networked format, as pilots for their innovative enhancement, with the expectation of implementing a more comprehensive enhancement and redevelopment plan. The cultural landscape of the new Cyprus Museum also looks at inclusion, participation in local social and human capital, promotion of tourism, and economic sustainability.

These urban design ideas seem to be inversions of the historical idea of the landscape of the museum, for example, in the sense that, traditionally, the museum was a building that stood out as distinct from the city, both spatially, through such devices as areas separating it from the main urban fabric, changes of levels for entrances, and lack of visual links to and from the interior, and functionally, by proposing structured experiences with no continuity with or resemblance to what is offered by the surrounding city. In contrast, the case study that is presented in the current paper points to a new concept of the landscape design of the museum, which aims to be part of the city, both in the sense of how it connects to it and in being internally more like a city, and so a continuation of it. This idea of the landscape design of the museum seems also to stand for a certain type of informational experience created by the landscape of the contemporary museum. Rather than proposing a "fixed view of culture" and "monolithic linear narratives", it seeks, like connected and explorable urban space, to "encompass a variety of viewpoints" [84]. At the same time, by rendering dominant collective and shared experiences, it emphasizes the role of the museum as a public building, a social space, as well as the surrounding area of the museum as a public open space. Therefore, the social experience of the contemporary museum becomes richer in the manner of city space and its surrounding open space. As was said of Tate Modern [85], the people visiting a museum and the works of art combine in an interesting dance of value creation: people are moved by what they see and hear in the galleries, while the very fact that there are so many visitors itself contributes to the experience. Therefore, it is important that these senses can continue also in the surrounding open space of the museum as proposed. The results of this research are related to the design decisions taken for the competition and the design of the outdoors of the museum, which can offer a continuity with the indoors of the museum and also offer opportunities to learn the history of planting and other construction materials. These results are replicable to other similar projects. The future implementation of the research is to develop the flexibility of the interior/exterior spaces of the museums.

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In conclusion, this paper gives a comprehensive proposal of the landscape design for the New Archaeological Museum in Cyprus as well as how to coordinate with the architectural design of the Museum building, and with the adjacent landscape of the surrounding area (e.g., Pedieos River and City park) to increase connectivity between green paces (like parks and riverfronts) throughout the city.

The design proposal aims to interact and merge the landscape design of the museum with the building architecture and the "thematical gardens" act as outdoor exhibitions of the museum. This reveals a rich relationship in which nothing can be removed [25], because everything that belongs to this newly created world is inherent. The outdoors of the museum aims to communicate with the indoors by continuing by continuing the exhibitions in the outdoors and continuing the same design concept inside and outside.

The museum project as a whole explores the human experience and the intersections where landscape and architecture meet. The integration of architecture with landscapes is the key point to the experience of our design. The landscape is an inspiration for the architecture, and vice versa. The building occupies a certain part of the plot where the shape recalls the nearby fortified wall's diamonds for the lower sheltered facade of the building, providing both natural sunlight control and burglar-proof safety, and the shape of the museum allows shelter from the presence and experience of the outer space with a hardscape entry plaza with separate guesthouse, a large courtyard, and a series of thematical gardens transforming from the enclosure to the opening, and then from the opening and the connection to the city garden and the riverside. Made of stabilized earth, the paths integrate into the landscape and indicate curving paths between vegetation, traces of structures, and elements with archaeological interest.

The building design in the proposed new Cyprus Museum blends harmoniously with the surrounding landscape. The goal of the landscape design was to create an environment that promotes the culture and the well-being of humans and ecosystems. Furthermore, according to Dariusz Stasik, organic architecture uses natural light and ventilation, thereby saving energy and reducing the impact on the environment [86]. The landscape part in our case is not seen as a background, but as a partner working with architecture, and can be seen also from the building windows. The use in the landscape of suitable ecological and renewable building and plant materials, and of flowing shapes, contributes to sustainable development. The organic architecture approach pioneered by architects such as Frank Lloyd Wright [87] and continued by visionaries such as Javier Senosiain challenges traditional notions of space and design, fostering a deeper connection between residents and the natural world around them. After all, Wright himself had predicted that "the work of the future will indeed become easier"; "fewer lines, fewer shapes, more expressive; less work, more expressive; more plastic; more fluid, though more coherent; more organic." [88]. Furthermore, intersecting landscape and architectural design can be done, as happened in the present case study by considering landscape design early on, and architects inviting landscape architects to continue to participate in the building design. Not only will the project be aesthetically advantaged, but it can also be an effective tool for the well-being of the users and future generations. Furthermore, the risk at the intersection between architecture and landscape is of not finding the balance between the two and going to the one or the other direction.

The landscape design of the New Archeological Museum of Cyprus designed by the author aimed not only to bring art outside of the museum walls, but bring the "park itself into the landscape of the city", as also mentioned similarly by Motloch that more and more museums have large open-air gardens and rich collections, which they present in their exhibitions, and others that focus on garden history across their country [89].

5. Conclusions

The study highlights the importance of landscaping in the new museum gardens in relationship to the proposed building architecture of the museum and the surrounding urban matrix in terms of green space coverage and extent. The findings have important

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implications for landscape architects, architects, landscape designers, and urban planners who focus on improving urban ecological planting (biodiversity) and building materials.

The new museum garden case study illustrates the transformation of a specific site from an open abandoned area to a museum with a new landscape and "Theme Gardens". This type of transformation usually takes place in small steps through everyday decisions about maintenance and investment and based on expectations for the future of the land.

In conclusion, the landscape proposal brings architecture, nature, culture, and history together into an overall experience, combining different thematical gardens such as a "plaza" or courtyard, "stone garden", "sacred grove", "sacred garden", and "olive garden" and inviting new as well as alternative kinds of exhibitions out of the museum. In a few words, the proposal combines landscape and architecture in the heart of Nicosia. The design also provides the city with a "Public Park" planted with endemic Cypriot species as part of the museum experience.

Future research could involve the change in focus of museums from being primarily custodians of large collections to being places where people can engage and connect; historical and thematical gardens have the potential to provide numerous opportunities for museums across the Mediterranean.

Both aspects of the experience of diversity and liveliness characterize urban life—in other words, the museum and its landscape as part of the city, or the *urbanized museum* similarly suggested also by Tzortzi [12]. Additionally, it is crucial to find and develop additional methods of integrating research with design to improve the practice of landscape architecture, without sacrificing the freedom of the profession where other knowledge, including intuition and experience, are often necessary for the profession [32].

Evaluating the landscape design by the author is somehow a limitation since evaluating the success of one's own design is somewhat subjective and difficult. After the construction is complete, a post-evaluation would be beneficial.

This study "opens the door" to future research questions, like the study of the land-scape methodology processes in other cultural buildings. For this purpose, long-term and larger-scale studies are needed.

For future research, it is suggested that the design of "Theme Gardens" around cultural buildings should take into account the history, climate and ecology of the area and interact with the architecture of the building.

The current findings can be used to support cross-cultural landscape design and architecture, emphasizing "nature as culture" and the integration of architecture and landscape design to create attractive everyday environments in urban environments.

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References

- 1. Brandon, L.; Dickenson, V.; Grattan, P.; Lacroix, L.; McMaster, G.; Fontaine, N.; Maracle, L. *The Good Lands: Canada Through the Eyes of Artists*; Publishing: Vancouver, BC, Canada, 2017; ISBN 978-1-77327-024-1.
- 2. Tuan, Y.-F. *Space and Place: The Perspective of Experience*, 7th ed.; University of Minnesota Press: Minneapolis, MN, USA, 2011; ISBN 978-0-8166-3877-2.
- 3. Macdonald, S. Museums, National, Postnational and Transcultural Identities. Mus. Soc. 2015, 1, 273–286. [CrossRef]
- 4. Tuan, Y. Passing Strange and Wonderful: Aesthetics, Nature, and Culture; Kodansha International: New York, NY, USA, 1995; ISBN 978-1-56836-067-6.
- 5. Spring, J.A. Design of Evidence-Based Gardens and Garden Therapy for Neurodisability in Scandinavia: Data from 14 Sites. *Neurodegener. Dis. Manag.* **2016**, *6*, 87–98. [CrossRef] [PubMed]
- 6. Connell, J.; Meyer, D. Modelling the Visitor Experience in the Gardens of Great Britain. *Curr. Issues Tour.* **2004**, *7*, 183–216. [CrossRef]
- Kaplan, R.; Kaplan, S. The Experience of Nature: A Psychological Perspective; Cambridge University Press: Cambridge, UK, 1989; ISBN 978-0-521-34139-4.

Land **2024**, 13, 2082 25 of 27

8. Souter-Brown, G.; Hinckson, E.; Duncan, S. Effects of a Sensory Garden on Workplace Wellbeing: A Randomised Control Trial. *Landsc. Urban Plan.* **2021**, 207, 103997. [CrossRef]

- 9. Souter-Brown, G. Landscape and Urban Design for Health and Well-Being: Using Healing, Sensory, Therapeutic Gardens; Routledge: Abingdon, UK, 2014; ISBN 978-0-415-84351-5.
- 10. Goulty, S.M. Heritage Gardens: Care, Conservation, and Management; Routledge: London, UK; New York, NY, USA, 1993; ISBN 978-0-203-16805-9.
- 11. Wang, X. Translating Gardens into Accessible Multisensory Tours for Blind and Partially Sighted Visitors: An Exploratory Case Study. *Univ. Access Inf. Soc.* **2024**, 1–14. [CrossRef]
- 12. Tzortzi, K. The Urbanized Museum. Mus. Soc. 2024, 22, 129–140. [CrossRef]
- 13. Keogh, L. The Garden in the Museum: Captivating Audiences inside and Out. Aust. Gard. Hist. 2024, 35, 16–20.
- 14. Baldwin, E. Intersections: Museums Where Landscape and Architecture Meet. Available online: https://architizer.com/blog/inspiration/stories/beyond-landmarks-what-makes-architecture-truly-meaningful/ (accessed on 20 October 2024).
- Sacchet, A. International Competition for Landscape Design and Indoor/Outdoor Museum Design System of the San Michele Karst Area. Available online: https://archello.com/project/international-competition-for-landscape-design-and-indooroutdoor-museum-design-system-of-the-san-michele-karst-area (accessed on 20 October 2024).
- 16. Gullino, P.; Pomatto, E.; Gaino, W.; Devecchi, M.; Larcher, F. New Challenges for Historic Gardens' Restoration: A Holistic Approach for the Royal Park of Moncalieri Castle (Turin Metropolitan Area, Italy). *Sustainability* **2020**, *12*, 10067. [CrossRef]
- 17. Nagpal, S.; Sinha, A. The Gomti Riverfront in Lucknow, India: Revitalization of a Cultural Heritage Landscape. *J. Urban Des.* **2009**, *14*, 489–506. [CrossRef]
- 18. Vanni Accarigi, I.; Crosby, A. Remapping Heritage and the Garden Suburb: Haberfield's Civic Ecologies. *Aust. Geogr.* **2019**, *50*, 511–530. [CrossRef]
- 19. Carmona, M. Public Places-Urban Spaces: The Dimensions of Urban Design; Carmona, M., Ed.; repr.; Architectural Press: Oxford, UK, 2004; ISBN 978-0-7506-3632-2.
- 20. Dercon, C.; Serota, N. *Tate Modern-Building a Museum for the 21st Century*; Dercon, C., Serota, N., Eds.; Tate Publishing: London, UK, 2016; ISBN 978-1-84976-401-8.
- 21. Eliasson, O. The Future Is Curved. *Archit. Des.* **2014**, *84*, 86–93. [CrossRef]
- 22. Coppolino, F.; Di Palma, B. Museums of Landscape. A Project for the Tuscia's Archaeological Heritage. *Athens J. Archit.* **2024**, *10*, 1–29. [CrossRef]
- 23. Catherine Mosbach "Paesaggio e Trame Archeologiche". Archeolog. Paesaggi Quotid. 2013, 29, 60–61.
- 24. O'Neill, J. The Best Museum Gardens, According to Museum People. Available online: https://www.aam-us.org/2024/05/03/the-best-museum-gardens-according-to-museum-people/ (accessed on 20 October 2024).
- 25. Tzortzi, J.N.; Visconti, M. The Archeological Museum of Cyprus In Nicosia Architectural And Landscape Design Proposal. In *Connecting Heritage Sharing the Heritage Perspective Across Different Domains*; Tzortzi, J.N., Lux, M.S., Eds.; Urbanistica Dossier: Rome, Italy, 2024; pp. 7–21.
- 26. Steenbergen, C.M.; Mihl, H.; Reh, W. (Eds.) *Introduction: Design Research, Research by Design. In Architectural Design and Composition*; THOTH: Bussum, The Netherlands, 2002; pp. 12–25.
- 27. Deming, M.E.; Swaffield, S.R. Landscape Architecture Research: Inquiry, Strategy, Design; Wiley: Hoboken, NJ, USA, 2011; ISBN 978-0-470-56417-2.
- 28. Milburn, L.-A.S.; Brown, R.D. The Relationship Between Research and Design in Landscape Architecture. *Landsc. Urban Plan.* **2003**, *64*, 47–66. [CrossRef]
- 29. Nijhuis, S.; De Vries, J. Design as Research in Landscape Architecture. Landsc. J. 2019, 38, 87–103. [CrossRef]
- 30. Wang, D. Architectural Research Methods, 2nd ed.; John Wiley & Sons, Inc.: Somerset, UK, 2013; ISBN 978-0-470-90855-6.
- 31. Nijhuis, S.; Bobbink, I. Design-Related Research in Landscape Architecture. J. Des. Res. 2012, 10, 239. [CrossRef]
- 32. Jansson, M.; Vicenzotti, V.; Diedrich, L. Landscape Design Based on Research. A Methodological Guide to Design-Oriented Projects for Students and Teachers in Landscape Architecture; Swedish University of Agricultural Sciences: Uppsala, Sweden, 2019. [CrossRef]
- 33. Alday, I. From Disciplinary Fields to Interdisciplinary Challenges. In *Interdisciplinary Design Thinking in Architecture Education*; Kim, J., Ed.; Routledge: London, UK, 2023; ISBN 978-1-00-329635-5.
- 34. Statista Research Department Green Space per Inhabitant in the City of Nicosia in Cyprus in 2018, by Category. Available online: https://www.statista.com/statistics/860638/green-areas-per-inhabitant-in-nicosia-in-cyprus/ (accessed on 20 October 2024).
- 35. Sari, L.H.; Rauzi, E.N. An Evaluation of Shading Device in Tropics Utilising the Sun-Path Diagram. *ARTEKS J. Tek. Arsit.* **2021**, *6*, 373–382. [CrossRef]
- 36. Lux, M.S.; Tzortzi, N. Green Fragments. Urban Courtyards Contribution to the Green Infrastructure of Historic Centres. In *Urban Heritage and Climate Change: Issues and Challenges*; Altralinea Edizioni: Rome, Italy, 2024.
- 37. Ucer, H.B.; Tzortzi, J.N.; Lux, M.S.; Ogut, O. Sustainable Urban Landscapes in Hot–Dry Regions: Climate-Adaptive Courtyards. *Land* **2024**, *13*, 1035. [CrossRef]
- 38. Tzortzi, J.N.; Lux, M.S.; Delgado, N.P. Infrastrutture verdi urbane in America Latina. Una strategia per i cortili di Bogotà | Urban Green Infrastructure in Latin America. A strategy for Bogota courtyards. *AGATHÓN* **2024**, *15*, 216–227. [CrossRef]
- 39. Lapithis, P. Bioclimatic Architecture and Cyprus; Pantheon Cultural Association: Nicosia, Cyprus, 2018; ISBN 978-9963-9789-8-4.

Land **2024**, 13, 2082 26 of 27

40. Sun Direction in Nicosia (Cyprus). Available online: https://sun-direction.com/city/18247,nicosia/ (accessed on 20 October 2024).

- 41. Sunrise, Sunset, Dawn and Dusk Times, Table. Available online: https://www.gaisma.com/en/location/nicosia.html (accessed on 20 October 2024).
- 42. Ma, M.; Kouis, P.; Rudke, A.P.; Athanasiadou, M.; Scoutellas, V.; Tymvios, F.; Nikolaidis, K.; Koutrakis, P.; Yiallouros, P.K.; Alahmad, B. Projections of mortality attributable to hot ambient temperatures in Cyprus under moderate and extreme climate change scenarios. *Int. J. Hyg. Environ. Health* **2024**, 262, 114439. [CrossRef]
- 43. Michaelides, S.; Evripidou, P.; Kallos, G. Monitoring and Predicting Saharan Desert Dust Events in the Eastern Mediterranean. *Weather* **1999**, *54*, 359–365. [CrossRef]
- 44. Statistical Service Census of Population and Housing. Available online: www.cystat.gov.cy/en/PressRelease?id=66207 (accessed on 20 October 2024).
- 45. Theophilou, M.K.; Serghides, D. Estimating the Characteristics of the Urban Heat Island Effect in Nicosia, Cyprus, Using Multiyear Urban and Rural Climatic Data and Analysis. *Energy Build.* **2015**, *108*, 137–144. [CrossRef]
- 46. Papantoniou, G.; Bourogiannis, G. The Cypriot Extra-Urban Sanctuary as a Central Place: The Case of Agia Irini. *Land* **2018**, 7, 139. [CrossRef]
- 47. Homer. The Iliad; Penguin Classics; Nachdr.; Penguin Books: New York, NY, USA, 2001; ISBN 978-0-14-044592-3.
- 48. Flora 2. Available online: https://www.theoi.com/Flora2.html (accessed on 29 July 2024).
- 49. Laertius, D.; Hicks, R.D. Lives of Eminent Philosophers 6.2; Diogenes: Zurich, Switzerland, 1925.
- 50. El-Weshahy, M.; Ellabban, E.A.M. Highlights on the Use of Acanthus as an Ornamental Motif from Greco-Roman to Islamic Period. *J. Assoc. Arab. Univ. Tour. Hosp.* **2022**, 22, 1–16.
- 51. Pilitsis, G. The Gardens of Adonis in Serres Today. J. Mod. Greek Stud. 1985, 3, 145–166. [CrossRef]
- 52. Webster, M. Webster's New Collegiate Dictionary; G. & C. Merriam Co: Springfield, MA, USA, 1974; ISBN 978-0-87779-318-2.
- 53. Barnett, R. Sacred Groves: Sacrifice and the Order of Nature in Ancient Greek Landscapes. Landsc. J. 2007, 26, 252–269. [CrossRef]
- 54. Tzortzi, N. The Public Space in Ancient Greece. In *The Natural Environment in Ancient Greece*; Department of Forestry and Environmental Management and Natural Resources, Democritus University of Thrace: Orestiada, Greece, 2010; pp. 85–94.
- 55. Burtt, B.L. Notes on the Flora of Cyprus. *Kew Bull.* **1954**, 9, 67–75. [CrossRef]
- 56. Holmboe, J. Studies on the Vegetation of Cyprus: Based upon Researches During the Spring and Summer 1905; Boktrykkeri, J.G., Ed.; Cambridge University Press: Cambridge, UK, 1914.
- 57. Kadis, C.; Pantazi, C.; Tsintides, T.; Christodoulou, C.; Papadopoulos, M.; Thanos, C.A.; Georghiou, K.; Constantinou, C.; Andreou, M. Establishment of a Plant Micro-Reserve Network in Cyprus for the Conservation of Priority Species and Habitats. In Proceedings of the 2nd Botanical Conference Islands and Plants: Preservation and Understanding of Flora on Mediterranean Islands, Sardinia, Italy, 18–22 October 2022.
- 58. Meikle, R.D. Flora of Cyprus; Bentham-Moxon Trust, Royal Botanic Gardens: London, UK, 1977; Volumes 1 and 2, ISBN 978-0-9504876-3-2.
- 59. Cyprus, Department of Forests; Merlo, M.; Croitoru, L. Cyprus. In *Valuing Mediterranean Forests: Towards Total Economic Value*; Merlo, M., Croitoru, L., Eds.; CABI Publishing: Wallingford, UK, 2005; pp. 213–227. ISBN 978-0-85199-997-5.
- 60. Zotos, S.; Vogiatzakis, I.; Manolaki, P.; Zomeni, M. Chapter 4—Habitats. In *An Introduction to the Wildlife of Cyprus*; Sparrow, D., John, E., Eds.; Terra Cypria: Limassol, Cyprus, 2016.
- 61. Ciesla, W.M. Forests and Forest Protection in Cyprus. For. Chron. 2004, 80, 107–113. [CrossRef]
- 62. Min. Agric. Nat. Res. Environ. & Depart. Forests, Vegetation and Flora of Cyprus 2012, Chlorida tis Kyproy. Available online: https://www.moa.gov.cy/moa/fd/fd.nsf/F8684AD2DDA64365C22581290029A4E8/\$file/Vegetation%20and%20Flora%20of%20Cyprus%20-%20Four%20fold%20flyer.pdf (accessed on 1 December 2024).
- 63. Pantelas, V.; Papachristophorou, T.; Christodoulou, P. *The Endemics: Cyperus Flora in Colour*, 1st ed.; The Endemics: Lefkosia, Cyprus, 1993; ISBN 978-9963-7931-0-5.
- 64. Kougioumoutzis, K.; Constantinou, I.; Panitsa, M. Rising Temperatures, Falling Leaves: Predicting the Fate of Cyprus's Endemic Oak under Climate and Land Use Change. *Plants* **2024**, *13*, 1109. [CrossRef]
- 65. Department of Forests Botanical Gardens. Available online: https://www.moa.gov.cy/moa/fd/fd.nsf/fd59_en/fd59_en/fd59_en? (accessed on 20 October 2024).
- 66. Georgi, N.J.; Zafiriadis, K. The Impact of Park Trees on Microclimate in Urban Areas. Urban Ecosyst 2006, 9, 195–209. [CrossRef]
- 67. Georgi, J.N.; Dimitriou, D. The Contribution of Urban Green Spaces to the Improvement of Environment in Cities: Case Study of Chania, Greece. *Build. Environ.* **2010**, *45*, 1401–1414. [CrossRef]
- 68. De Abreu-Harbich, L.V.; Labaki, L.C.; Matzarakis, A. Effect of Tree Planting Design and Tree Species on Human Thermal Comfort in the Tropics. *Landsc. Urban Plan.* **2015**, *138*, 99–109. [CrossRef]
- 69. Abreu-Harbich, L.V.; Labaki, L.C.; Matzarakis, A. Thermal Bioclimate in Idealized Urban Street Canyons in Campinas, Brazil. *Theor. Appl. Climatol.* **2014**, *115*, 333–340. [CrossRef]
- 70. Correa, E.; Ruiz, M.A.; Canton, A.; Lesino, G. Thermal Comfort in Forested Urban Canyons of Low Building Density. An Assessment for the City of Mendoza, Argentina. *Build. Environ.* **2012**, *58*, 219–230. [CrossRef]
- 71. Shashua-Bar, L.; Potchter, O.; Bitan, A.; Boltansky, D.; Yaakov, Y. Microclimate Modelling of Street Tree Species Effects Within the Varied Urban Morphology in the Mediterranean City of Tel Aviv, Israel. *Int. J. Climatol.* **2010**, *30*, 44–57. [CrossRef]

Land **2024**, 13, 2082 27 of 27

72. Streiling, S.; Matzarakis, A. Influence of Single and Small Clusters of Trees on the Bioclimate of a City: A Case Study. *Arboric. Urban For.* **2003**, 29, 309–316. [CrossRef]

- 73. Souza, E. Coolest White: A Painting to Reduce the Urban Heat Islands. Available online: https://www.archdaily.com/912311/coolest-white-a-painting-to-reduce-the-urban-heat-islands (accessed on 20 October 2024).
- 74. Radhi, H.; Assem, E.; Sharples, S. On the Colours and Properties of Building Surface Materials to Mitigate Urban Heat Islands in Highly Productive Solar Regions. *Build. Environ.* **2014**, 72, 162–172. [CrossRef]
- 75. Best Strategies to Reduce Light Pollution. Available online: https://university.gbes.com/wp-content/uploads/sites/21/2022/07/LEED-v4-OM-Light-Pollution-Reduction.pdf (accessed on 20 October 2024).
- 76. Jarrett, A. Rainwater Cisterns: Design, Construction, and Treatment. Available online: https://extension.psu.edu/rainwater-cisterns-design-construction-and-treatment (accessed on 20 October 2024).
- 77. Pourasl, H.H.; Barenji, R.V.; Khojastehnezhad, V.M. Solar Energy Status in the World: A Comprehensive Review. *Energy Rep.* **2023**, *10*, 3474–3493. [CrossRef]
- 78. Shahrad, A. What Are the Design Principles of Healing Gardens: For People Who Are Suffering from Stress-Related Diseases? Swedish University of Agricultural Sciences: Alnarp, Sweden, 2013.
- 79. Lau, S.S.Y.; Gou, Z.; Liu, Y. Healthy Campus by Open Space Design: Approaches and Guidelines. *Front. Archit. Res.* **2014**, *3*, 452–467. [CrossRef]
- 80. Rhizopoulou, S. Symbolic Plant(s) of the Olympic Games. J. Exp. Bot. 2004, 55, 1601–1606. [CrossRef]
- 81. Harries, B.; Chalmin-Pui, L.S.; Gatersleben, B.; Griffiths, A.; Ratcliffe, E. 'Designing a Wellbeing Garden' a Systematic Review of Design Recommendations. *Des. Health* **2023**, *7*, 180–201. [CrossRef]
- 82. Douglas, O.; Lennon, M.; Scott, M. Green Space Benefits for Health and Well-Being: A Life-Course Approach for Urban Planning, Design and Management. *Cities* **2017**, *66*, 53–62. [CrossRef]
- 83. Ballew, M.T.; Omoto, A.M. Absorption: How Nature Experiences Promote Awe and Other Positive Emotions. *Ecopsychology* **2018**, 10, 26–35. [CrossRef]
- 84. Gale, M. Fixed and Changing: New Displays at Tate Modern. In *Tate Modern: The Handbook*; Gale, M., Tate Modern (Gallery), Eds.; Tate Publishing: London, UK, 2012; pp. 29–34. ISBN 978-1-84976-315-8.
- 85. Holden, J. The Cultural Value of Tate Modern. In Tate Modern: The First Five Years; Tate: London, UK, 2005; ISBN 978-1-85437-653-4.
- 86. Stasik, D. Organic Architecture and Neuroarchitecture, or Harmony between Human Being and Nature. Available online: https://dariuszstasik.com/en/organic-architecture-and-neuroarchitecture-or-harmony-between-human-being-and-nature/ (accessed on 1 September 2024).
- 87. Wright, F.L.; Saint, A. An Organic Architecture: The Architecture of Democracy; Lund Humphries: London, UK, 2017; ISBN 978-1-84822-232-8.
- 88. Benedetta Ricci The Harmony of Form and Function: Frank Lloyd Wright's Organic Architecture Artland Magazine. Available online: https://magazine.artland.com/when-form-meets-function-frank-lloyd-wright-organic-architecture/ (accessed on 1 December 2024).
- 89. Motloch, J.L. Introduction to Landscape Design, 2nd ed.; Wiley: New York, NY, USA, 2001; ISBN 978-0-471-35291-4.

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