"Conservation of Architectural Heritage, CAH" 23-27 November 2015, Luxor

Establishing a Process for Handling Valuable Landscapes: A Comparative Analysis for Managing Historical Parks in Egypt

Nourhan H. Abdel-Rahman*

Cairo University, Faculty of Engineering, Department of Architecture, University Street CUFE Campus, Giza 12316, Egypt

Abstract

The preservation of Cultural Heritage in historically rich third world countries is a complex issue. Historical urban parks in particular face various challenges relating to management and evaluation. This paper tackles formulating a pragmatic process for managing historical urban parks in Egypt through a comparative analysis between distinguished foundations in the field. These are UNESCO's World Heritage Convention (Global), Med-O-Med (Intercultural, Mediterranean and ME countries), NPS (National, USA), TCLF (Non-governmental, USA) and Barcelona's City council (Local, Spain). The research is verified through survey among professionals in relevant fields in Egypt, to authenticate the applicability of the recommended proposal.

1. Introduction

One of the resilient ways of preserving the collective memory of history is through historical landscape settings. Historically intense countries like Egypt carry endless chronicles within their open spaces. Sadly, we find layers of this history threatened by hectic stresses not limited to aging erosion, user needs and urban growth. With little awareness from community and municipality, urban parks are deprioritized compared to other contemporary demands. The dispute of appropriate management of historical landscapes is already a vital issue pursued by various major foundations globally, in hope to preserve valuable landscape settings. These efforts that spread worldwide had

* Corresponding author. Tel.: +2 0100 6660119; fax: - .
  E-mail address: nourhan_abdelrahman@hotmail.com

an inclusive vision for settings that need protection that sites requiring preservation are not just buildings, but rather the whole context (Lipský & Romportl, 2007). This issue has been covered by different approaches in various countries, yet Egypt remains isolated in this trajectory. The gap be-tween global movement and Egyptian realm concerning valuable landscapes is rather noticeable and yet to be studied. This research investigates these existing approaches through analyzing five major foundations working actively in the field, comparing between them, in order to conclude a proposal that suits the Egyptian context.

Nomenclature

CLR   Cultural Landscape Report
DOI   Department of Interior
FUNCI Fundación de Cultura Islámica
ICOMOS The International Council on Monuments and Sites
IUCN   International Union for Conservation of Nature
NPS   National Park Service
QoL   Quality of Life
TCLF   The Cultural Landscape Foundation
UNESCO United Nations Educational, Scientific and Cultural Organization
WHC   World Heritage Convention
WHL   World Heritage List
WOT   What's Out There (TCLF List)

---

2. Parks as a Product in Egyptian Cities

To illustrate the significance of this research, it is vital to review the cur-rent situation of parks in Egypt. Cairo, as the biggest city in Egypt in terms of area and population, and its capital, is the most adequate subject for pilot analysis. Thus an analysis of the current situation of Egyptian urban parks in Cairo portrays a representation of the local context. Urban parks in Cairo suffer in various aspects. These aspects include lack of sufficient planning, design and management, as well as being deprioritized in funding and maintenance efforts. Thus the result is noticeable degradation in quality, quantity, and distribution of such urban green spaces in the city (Abd El Aziz, 2012, p. 39).

The main problems with urban parks in Cairo can be summarized in three focal attributes that are clearly noticeable in the Egyptian urban context. These are the shortage in quantity, poor distribution, and poor quality.

- **Shortage in Quantity;** can be expressed in the rather low citizen quota of open green spaces in Great Cairo, which doesn't exceed 1.2 m2/person. This is considered extremely low as compared to international figures (Abd El Aziz, 2012).
- **Poor distribution;** evident in the unjust division of existing green spaces is substantially apparent in the difference between middle/high social class areas and lower class areas. For example, Zamalek (a district for upper middle/high class) has plenty of parks, and a citizen quota of 10.9 m2/person, while other poorer districts like Mataria have nearly no public green spaces at all (Abd El Aziz, 2012).
- **Poor Quality;** appears mostly in parks that have been design or redesigned in the modern era in Cairo (late 20th century till present), as it resulted from applying "prototype designs", which show no respect for user needs or economical and environmental aspects. Management regimes have a share in the liability for this situation, as their policies constantly failed to preserve and maintain parks in acceptable condition. They also ignore over-seeing any activities to attract users from surrounding neighborhoods (Abd El Aziz, 2012).

3. Research Approach

The research is a qualitative comparative analysis between the various approaches taken by the most trusted and globally renowned foundations in the field of cultural landscapes and heritage preservation. These foundations are the UNESCO's World Heritage Convention, Med-O-Med in Spain, NPS in USA, TCLF in USA, and Barcelona's City Council in Spain. These foundations are known to be leading organizations in the field of cultural heritage, and they are all referenced in various, if not all, relative literature in the field. The scope of work for the chosen foundations was meant to include global, international, national and city scales. Global and International entities provided a general range of guidelines for different cultures and settings. Alternatively, national and city-scale organizations gave a more focused, customized approach for specific conditions, as they address a certain region/urban context.

The comparison between these foundations was based on distinctive points that observed the process of identifying, classifying and documenting any given historical landscape. This includes their methodology of work; how they categorize and approach historical landscapes; how they document and help uphold different sites according to specific criteria and guidelines, and more points related to the process and guidelines.

For each foundation, specific information is gathered and comparatively analyzed. This information includes mission, scope of work, criteria of inscription and management process. To appropriately conclude, a survey for academics and professionals in the fields of Landscape conservation, urban design and architecture in Egypt was conducted, in order to qualitatively assess the optimum and pragmatic criteria, guidelines and process for preserving valuable landscapes in Egypt. The specimen was a stratified probabilistic sample of professionals and academics.

3.1. UNESCO's World Heritage Convention (Global Scale)

The UNESCO was initiated at wartime to unite humanity towards peace, education, and reconstruction of destroyed in war in 1940s. It passed through various stages including origination of the WHC in 1972 (UNESCO, 2010) . Today, WHC's World Heritage list includes hundreds of entries.

WHC's mission relates to encouraging and managing a positive relation be-tween cultural and natural landscapes, and state parties to which these they correspond. This includes encouraging preservation, establishing management plan and community participation, besides safeguarding, supporting awareness and assisting endangered sites (UNESCO's World Heritage Centre, 2012). UNESCO's WHC works on a rather global scope. Sites described in the World Heritage list are those proven irreplaceable, exceptional and points of reference in human history i.e. "outstanding universal value" (UNESCO's World Heritage Centre, 2008). The criteria for selecting sites for WHC are quite strict in relation to other organizations, comparably matched to the outstanding value of the sites added to UNESCO's world heritage listing. The full criteria are identified in Table 1 (UNESCO's World Heritage Centre, 2012).

The process of inscribing a site in the World Heritage List is quite strict and precise. The first step is that a State party nominates a site (one of its tentative list sites that resemble valuable landscapes in this county). Certain information have to be completed such as justification of the site's universal value, criteria under which it should be included, proof of integrity and authority. Other fields are described in detail in the operational guidelines of the UNESCO's WHC (UNESCO's World Heritage Centre, 2012, pp. 103-113), all gathered and sub-mitted in a nomination dossier. The second step is evaluation of the site by official advisory bodies of UNESCO's WHC, which are ICOMOS (for cultural landscapes) and IUCN (for natural landscapes). ICOMOS carries out complete thematic, "objective, rigorous and scientific" studies. This evaluation results in issuing a statement of out-standing value. Finally, World Heritage Committee reviews the evaluation to decide on including site in WHL (UNESCO's World Heritage Centre, 2012) (as in Fig.1).

Table 1. Criteria for selection of World Heritage Sites (UNESCO's World Heritage Centre, 2012, p. 20).

|		
CULTURAL LNADSCAPES	(i)	Represent a masterpiece of human creative genius
	(ii)	Exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
	(iii)	Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
	(iv)	Be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
	(v)	Be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
	(vi)	Traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria) ;
NATURAL LANDSCAPES	(vii)	Contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
	(viii)	Be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
	(ix)	Be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
	(x)	Contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of Outstanding Universal Value from the point of view of science or conservation.
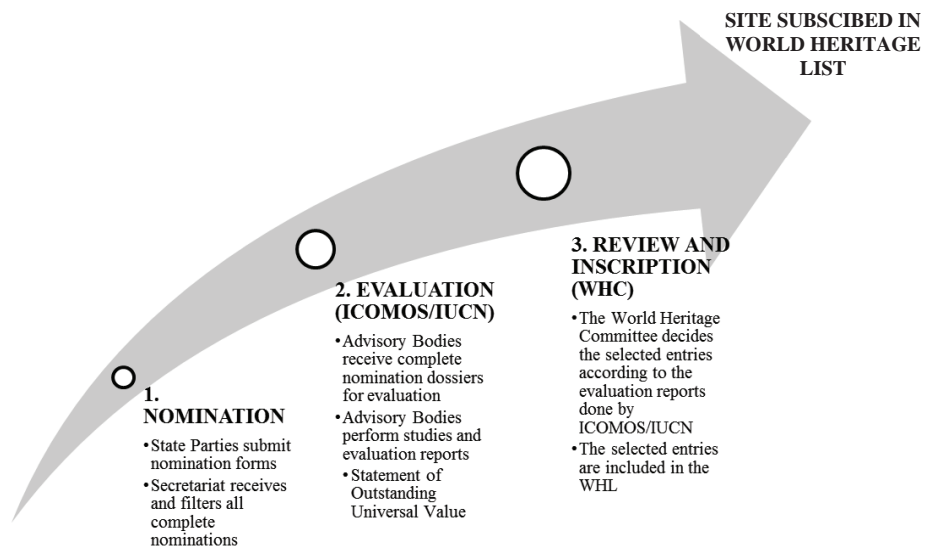
Fig. 1. Process of inscribing a Cultural Landscape in the World Heritage List (UNESCO's World Heritage Centre, 2012).

3.2. Med-O-Med (Intercultural Scale)

"Med-O-Med, cultural landscapes of the Mediterranean and the Middle East" is a program established by FUNCI (Fundación de Cultura Islámica), a non-profit, non-partisan, strictly independent cultural and scientific Spanish Organization (FUNCI, 1999). Med-O-Med Network of Gardens was first presented during an international meeting held by FUNCI in Alhambra, Granada in 2009 (Med-O-Med, 2013). Med-O-Med was basically initiated to make up for the shortage of funds available for conserving biodiversity and natural and cultural heritage in the South and East of the Mediterranean basin and the Middle East (as shown in Fig.2). To do so, they started a project of compilation of inventories that aims at including cultural landscapes in the area (Martin, 2013a).

The mission of the Med-O-Med includes promoting and supporting the initiatives that adopt solutions for sustainable development and conservation, as well as coordinating and implementing projects in the framework of Med-O-Med. It also focuses on giving visibility to Islamic culture in managing natural and human resources, and emphasizes the value of disseminating local knowledge of intangible heritage. The scope of Med-O-Med is rather intercultural, including different countries with common factors in geographically and culturally. The criteria for inclusion in Med-O-Med contemplates UNESCO's criteria for Cultural and Natural classification as their main guide. However, they have added a vastly important factor to the equation, which is the cultural factor (Arab-Muslim culture in this case) (Martin, 2013a). The criteria is also rather inclusive of cultural resources that fall under the classification of being designed landscapes, organically evolved landscapes or associative cultural landscapes (Med-O-Med, 2010).

The process of detecting and including gardens in the initiative is more integrative and multifaceted. In the beginning of the inventory of botanic gardens, an initial scanning of existing landscapes in Mediterranean and Middle Eastern countries, and outlining landscapes that were not previously considered as cultural landscapes. This is followed by an evaluation of the significance of these landscapes in relation to their countries and cultures. Afterwards, a search through the databases of other international entities for protected sites is conducted, emphasizing local varieties of relevant landscapes. Classifying the identified landscapes follows the previous steps, according to the UNESCO's criteria for classifying cultural landscapes (in addition to the cultural factor as mentioned earlier), thus adding the recognized landscapes to the inventory (Martin, 2013b). A second phase of adding entries to the inventory is through additions by individuals or institutions.

Fig. 2. Map of Med-O-Med Mediterranean and Middle East Countries (Med-O-Med, 2015).

3.3. National Park Service (NPS) (National Governmental Scale)

The idea of caring for national parks in USA evolved in the 1800s, when individuals raised the issue of preserving natural heritage and asked the government to form an entity for "national parks" (NPS, 2009b). In 1916, NPS was initiated by Congress as a bureau of the U.S. Department of Interior (DIO) for this purpose. Since then, NPS has been the governmental entity responsible for the care of American National Parks (NPS, 2009a). The mission of the NPS is interrelated with goals of the DIO. This mission can be summarized as in Table 2 (NPS, 2005, p. 12). The scope of work of the NPS is obviously national, including all states in the US. In order to accept a site in their framework, NPS has strict filters that should apply to the nominated site. Among these criteria is that the site should possess nationally significant natural or cultural resources (Significance). The second criterion is Suitability. The site has to be a suitable addition to the system. The third criterion is feasibility, which indicates that the size of the site is appropriate and manageable by NPS at reasonable cost. The last criterion states that site must be directly managed by the Service, not by any other agency or organization (Direct NPS Management) (NPS, 2006).

In reference to the process of inscription, it includes a lot of legislation and has to be approved on different hierarchal authoritarian levels. After nomination is submitted to NPS for evaluation, NPS conducts a primary reconnaissance survey to gather basic information about nominated site. This survey should conclude all data that allows NPS to identify whether the site is nationally significant or not. A site that meets national significance criteria is then reviewed for feasibility and suitability criteria. If site has potential in terms of feasibility and suitability, NPS performs formal study of site with more comprehensive data. This survey is forwarded to Congress for review. If Congress approves the initial nomination of the site, the dossier is passed back to NPS to perform a full site study and develop a management plan with involvement of all stakeholders, including state agencies, local agencies and public participation. This detailed study is the Cultural Landscape Report (CLR). Each cultural landscape enlisted under NPS must have comprehensive CLR that allows for better management and documentation of the site's past, present and future development plans. The next step would be NPS formally reviewing the boundaries of site. The final decision to enlist a given site in NPS has to be taken formally by Congress in coordination with recommendations from the Secretary of Interior (the process is fully analysed in Fig.3).

Table 2. Goals of NPS in relation to DOI Goals (NPS, 2005, p. 12)

| Department Of Interior Goals	NPS Goal Category	NPS Mission Goals
DOI Goal 1: Protect the Environment and Preserve Our Nation's Natural and Cultural Resources	Goal Category I: Preserve Park Resources	Ia. Natural and cultural resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context.
		Ib. The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.
DOI Goal 2: Provide Recreation for America	Goal Category II: Provide for the Public Enjoyment and Visitor Experience of Parks	IIa. Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.
		IIb. Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.
DOI Goal 1: Protect the Environment and Preserve Our Nation's Natural and Cultural Resources DOI Goal 2: Provide Recreation for America	Goal Category III: Strengthen and Preserve Natural and Cultural Resources and Enhance Recreational Opportunities Managed by Partners	IIIa. Natural and cultural resources are conserved through formal partnership programs.
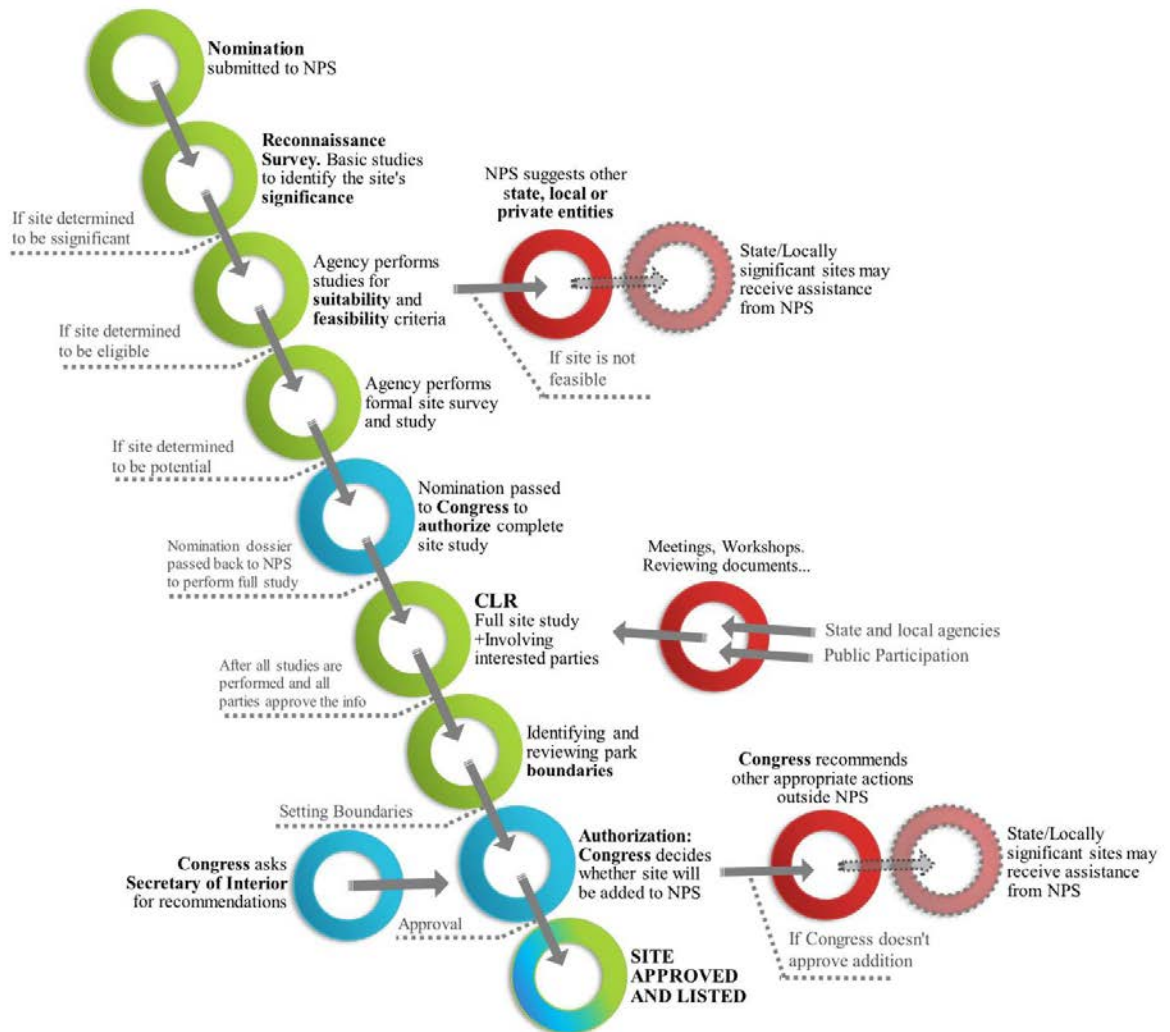
Fig. 3. Process of Inscription of a new Cultural Landscape in NPS (NPS, 2010) (Diagram developed by Author).

3.4. The Cultural Landscape Foundation (TCLF) (National NGO)

TCLF is a non-profit foundation in America established in 1998 by Charles Birnbaum (FASLA) and a group of landscape architects, educators and community leaders concerned about the declining public interest in, and stewardship of, America's cultural landscapes. The foundation focuses on all kinds of Cultural Landscapes that exist in USA whether actively designed or passively formed by community or Land use (Birnbaum, 2013). This mission of the TCLF principally concentrates on the collaboration between individuals and local, regional, and national groups to understand and protect land-scape heritage in the US. In addition, it works on the level of raising aware-ness and training the general public in regard of cultural heritage. The scope of TCLF is basically national. It focuses on all cultural landscapes that exist in the United States, no matter how small or big, universal or local.

TCLF initiated and maintained a rather powerful online database for cultural landscapes, called "what's Out There". This list contains more than 1300 entries that represent landscapes from all over the 50 states (TCLF, 2001). The criteria of inscription in the What's Out There (WOT) list depends mainly on passing through analysis/studies by experts to define its authenticity and cultural/historical value. The process of inscription begins with submitted

nominations from experts, members of TCLF and/or any member of the American society. These nominations are reviewed and studied in terms of their cultural and historical value. TCLF welcomes any historical landscape, no matter how small or unknown, as long as it represents a historical feature and a unique design (as shown in Fig.4).
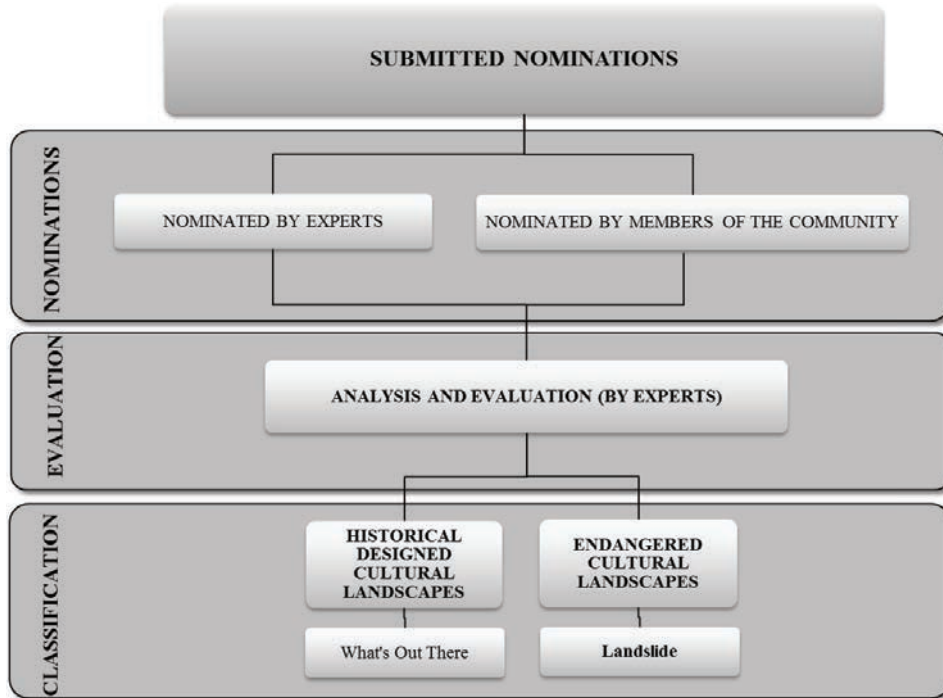

Fig. 4. Process of Inscription of a new Cultural Landscape in TCLF (Deduced by Author from TCLF website information).

3.5. Barcelona City Council (BCN) (Local Scale)

As a compact city, with high built-up density, it is very interesting to study how a city that is somehow similar to Egyptian cities in terms of urban compactness has dealt with its cultural and natural heritage. Barcelona City Council has always been actively committed to keeping sustainability and nature on its agenda for development. According to their 2020 plan, BCN's mission in pursuit of better integration between nature and urbanism included preserving and enhancing natural heritage, achieving optimum green infrastructure, educating society about green infrastructure and biodiversity, and making the city more resilient to face future challenges such as climate change (BCN, 2013). BCN works on local city scope, in coordination with laws and regulations of the country. The criteria followed to identify and enlist certain sites as cultural landscapes in BCN depends on the national vision and official law that regulates all relevant issues to Catalan Cultural Heritage (RiveroEspais, 2013). The 9/1993 Law for Catalan Cultural Heritage states that historical parks are one of the precise categories of "cultural assets of national interest", worthy of preservation. As for the process of inscription, it starts with nomination initiated by local office of public authorities or other stakeholders in the community. This is followed by consultation period to refer the declaration to the council concerned. If site receives a favourable advisory account from the Cultural Heritage of Catalonia, the formulation of a full heritage report commences, including architectural, archaeological, artistic, documentary info about site. Should declaration be proposed by Ministry of Culture and approved by government, it is published to stakeholders and municipalities (Catalan-Presidency, 1993).

4. Data Assessment/Implementation for Egyptian Context

4.1. Survey Design

In order to properly utilize the data and analysis presented in the previous section, it is imperative to validate formulate a comparative matrix and use a precise measuring tool to extract the suitable criteria, process steps and mission that could be pragmatically implemented in the Egyptian context. Hence it was vital to execute a survey amongst professionals and academics in the fields of Landscape conservation, Architectural Conservation, Landscape Design, Architecture and Urban Design. This survey summarizes how professionals and academics view the guidelines used in the studied foundations, in terms of suitability for local practice in Egypt according to the average expert opinion. The survey is classified as in the following figure (Fig.5).
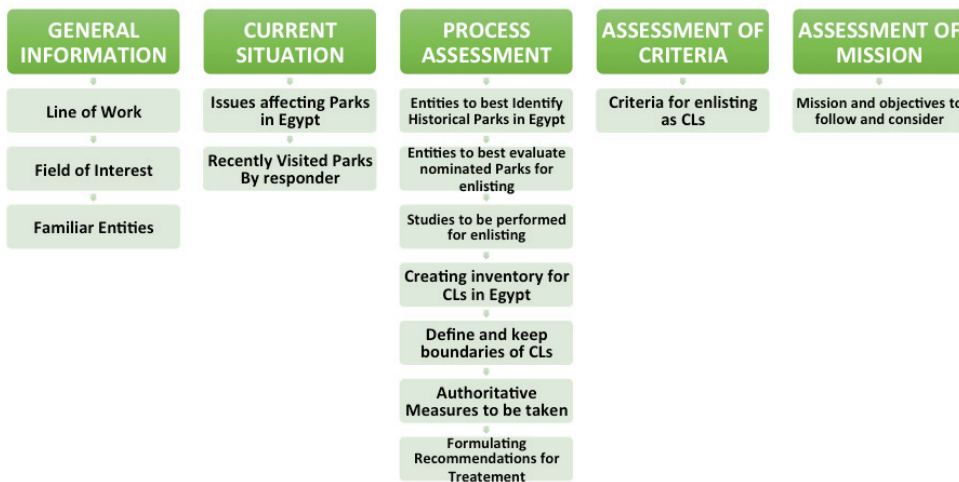

Fig.5. Survey Structure for comparative analysis.

The survey-fillers from the previously mention quota were a stratified random sample. The ages of the sample started approximately from 20 and above (as graduates and professionals with minimum a bachelor degree in one of the targeted fields). The survey was disseminated electronically through online social networks amongst individuals fitting the survey profile. The survey was filled by 32 professionals, academics and graduates in the relevant fields.

4.2. Survey Results

The survey results tackled the research issue from various angles, in order to make sure the concluded proposal is sound and pragmatically relevant to context. One of the main commentary was that the survey takers' opinion about the major problematic issues that face Egyptian parks. Lack of proper management system and process was on top of their list, followed by shortage in quantity in relevance to the urban mass. This shows how significant management process and system are to the Egyptian community when it comes to the study area.

Referring to the ***mission and purpose*** of the proposal that guides the intervention initiated in it, the analysis of the responders' opinions showed great enthusiasm towards the issues related to public parks and gardens in general as well as historical value and layers. <u>*Documentation and Preservation mission*</u> statements were voted highest with more concern towards the importance of documenting and measuring the current and historical layers of design and changes that took place in the site. <u>*Public Awareness and Participation mission*</u> statements were more related to the inclusion of the community members in process of identification and preservation through awareness campaigns and active input of residents in the process. <u>*Public Enjoyment and Future Development mission*</u> statements focused more on the factor of public satisfaction with the parks and gardens (as stated previously in the criteria section). This also

includes the treatments and plans for future development as an addition layer of contemporary documentation to be added to the historical ones.

As for the **criteria** for identifying historical parks, the assessment survey favored four categories of criteria; Culture-related criteria, Historical Interpretation criteria, criteria reflecting Uniqueness and public enjoyment criteria. *Culture-Related Criteria* chosen by the responders were the ones reflecting the relationship between the site/garden and a certain culture (whether still present or disappeared). The chosen criteria also emphasized the sites that reflect fragments or essence of the Egyptian culture, even if this doesn't relate to historical events. *Historical Interpretation Criteria* chosen were basically a reflection of the layers of history that are represented in the landscape. For example, the site's relations to certain historical events, or to a certain figure in Egyptian history. If the site is designed by a well-known historical landscape architect or master gardener. All these factors were imbedded in the chosen historically related criteria. *Criteria Reflecting Uniqueness* were also preferred by the responders. These refer to the site's exceptional qualities in terms of natural elements, botanical plants or existing natural habitat. This also includes the site being of unique typology in the studies urban environment (city/region/country). *Public Enjoyment Criteria* were also highly preferred by responders, as this is a major factor in the current use of the parks as public places of enjoyment. Thus if a site is currently effective in terms of public enjoyment for the community, it is an additional reason for making sure that all the layers of design and usage of the park are kept intact, historical might they be or contemporary.

For the **process of inscription, evaluation and management** of historical parks, there were various responses with respect to different steps in the process. In their choice of stakeholders who would take part in nominating historical parks, the responses gathered were so close in terms of numbers and percentile. This reflects many aspects, the main one is that responders basically don't prefer one of the stakeholders, as long as the responsible entity shall perform the duties correctly. For the evaluation of parks however, the response favored expert agencies and individuals highly, without considering the authoritative responsibility hierarchy that discards the factor of expertise. As for the logistical cycle of approvals that the responses favored, it was an indication of the mediation needed for this process to take place. Passing by authoritative approvals is essential, but on a local scale that doesn't exceed 2 levels of authority. This aims at eliminating the slowing down of the whole process for the sake of hierarchal approvals.

From the survey and analysis concluded above, the following proposal has been proved valid for the identification and handling of historical parks and garden in Egypt. The Following table illustrates the concluded mission, criteria and process for the application proposal. This proposal can be used for application on historical parks in Egyptian cities.

4.3. Concluded Proposal

The gathered data was formulated into a matrix and analysed in parallel for the five foundations. This matrix was introduced to the survey specimen for validation. The survey resulted in a rather comprehensive interpretation that represents a knowledgeable vision for Egypt's historical parks. The final proposal is presented in the following table (table 3), including mission, criteria and process of identifying, analysing and inscribing a site as historical park. The chosen mission themes relate to three main aspects, namely preservation, public awareness, and public enjoyment, which address the major problematic issues that face urban parks in Egypt. The criteria for inscription included attributes from UNESCO's criteria which don't address universality, but rather features of historical parks that are applicable at a local scale. Other criteria included cultural relevance to Egyptian community as well as public interest. The accumulative process is a comprehensive procedure that starts with nomination by NGOs and local municipalities, followed by evaluation through documentation of historical info and current situation of site (CLR). The next step is municipalities' review and approval of the report. Finally, the site is enlisted in an inventory of Egyptian historical parks and recommendations for management and design are made for future development. These main subjects constitute the basis of an identification and management system that applies to Egypt's context and culture with knowledge and understanding of the concurrent efforts in the global field.

Table 3. Survey Results: Comprehensive Proposal for Historical Parks in Egypt

MISSION	**IDENTIFICATION AND PRESERVATION** • Protect, restore, maintain and manage ALL natural and cultural heritage sites. • Encourage authorities to protect their natural and cultural heritage. • Encourage cooperation in the conservation of the world's cultural and natural heritage. • Promote initiatives and proposals for adopting sustainable development and natural resource conservation based on local culture and needs. **PUBLIC AWARENESS AND PARTICIPATION** • Encourage participation of the public in the preservation of their cultural and natural heritage. • Ensure that park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations. • Training professionals, students, teachers, and the general public to recognize, document and safeguard cultural landscapes. **ENJOYMENT AND FUTURE DEVELOPMENT** • Ensure that visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities. • Making the city more resilient in the face of future challenges such as climate change.
CRITERIA	**GENERAL CRITERIA** • C1.1: Site represents interchange of human Values (relative to time span/cultural area), in developments in design (architectural/technological/arts/landscape). • C1.2: Site contains important natural habitats for conservation of biological diversity, including endangered species. • C1.3: Site is a historical garden or contains a historical monument • C1.4: Site bears testimony of a cultural tradition or civilization (still living or disappeared). • C1.5: Site is a unique example of a particular type of architecture/resource/landscape. **CULTURAL RELEVANCE** • C2.1: Site represents a value/quality that relates to or illustrates the Egyptian culture and heritage. **PUBLIC INTEREST** • C3.1: Site offers opportunities for public enjoyment or for scientific study.
PROCESS OF INSCRIPTION	**A. IDENTIFICATION AND NOMINATION** NGOs working in the field and municipal institutes should identify and nominate parks for enlisting and conservation. **B. EVALUATION OF NOMINATIONS** Expert agencies or individuals in the field evaluate the nominations for documentation and filtration. **C. EVALUATION DOCUMENTATION** Comprehensive studies on the nominated site should be executed. These include: • Full historical reports (architectural, archaeological and artistic). • Comprehensive graphical documentation. • Detailed report of current condition. • Site Survey and updated documentation. • Any other information included in a CLR. **D. REVIEW AND APPROVALS** Nomination dossier with evaluation documents should pass through local municipality for approval and review (maximum 2 authoritative entities). **E. ENLISTING IN INVENTORY** The approved and documented site shall be added to inventory of Historical Parks in Egypt. **F. RECOMMENDATIONS** Recommendations for management, design and conservation shall be made according to expert opinion.

5. Proposal Application: Giza Zoo (Cairo)

As a pilot analysis for applying the proposed framework in the previous table (table 3), one of the most important garden in Cairo was chosen for study. The experimental application of the proposal can be achieved through qualitatively and quantitatively applying a measurable segment of it. When reviewing the different parts of the proposal, it is apparent that the measurability of the criteria section can be attained and valued through design analysis and configuration, unlike the mission and process of inscription, which would need vast resources and a long-term timeframe for verification. For this reason, the following analysis aims at verifying the reliability and measurability of the criteria proposed in this research.

5.1. Reason for Choice

The choice of Giza Zoo for this analysis and justification lies in various reasons. These can be summarized as follows:
- Its foundation date goes back to the 19th century, which places it in the most important era in the Egyptian history in relation to landscape design and innovation of urban development (during the timing of the Royal family of Muhammed Ali Pacha).
- It was designed by two of the most renowned landscape designers in the 19th century (Delchevalerie and Deschamps), and its design contains many elements that emphasize the historical and cultural values the manifested in this era.
- It is a unique example of this certain type of gardens in Cairo specifically and in Egypt generally (Zoological Garden). It was the first Zoological Garden to be created in Egypt and it contains many values that other zoos in Egypt lack. Other Zoos in Egypt don't contain such richness in design, culture and history.
- It is currently related to the Egyptian community, which is a phenomena worth investigation, given that most gardens and parks in Egypt are ignored and practically invisible to the community.

5.2. Giza Zoo Features vs. Criteria

The following layout (Fig.6) presents an analysis of the design features that Giza Zoo contains, which represents its cultural and historical significance as a park and a heritage site. These features are classified in light of the criteria that were generated in the proposal in the previous section. The analyzed features include historically significant architectural features/buildings, landscape features, memories related to historical events, unique activities and more.

In 1890, 50 Feddans of the 200 Feddans of the Giza Palace gardens were dedicated for establishing the Zoo. It was designed by Deschamps and Delchevalerie.

The Giza Zoo contains various buildings that are historically important (even if they are not defined as historical monuments). Examples: Reptiles House, Breeding Centre... etc.

Historical Buildings

The Giza Zoo is the First Zoo in Egypt, as the Phedive Ismail was the first to think of such a garden type when he decided to establish a Zoo Garden in Giza Palace.

Paths flooring design, dating back to the 19th C. Material: Black stone flags imported from Trieste. Technique: Arabesque and Roman Mosaic design. Current Condition: design bearly visible.

Artificial water features are part of the original design of the zoo in the 19th C. Despite its current deteriorating state, it is still present.

The Giza Zoo is a major attraction to Egyptians, especially in public holidays. During the highest season for the Zoo (Eid El Fetr), alot of inhabitants visit the Zoo.

Elephant House, built in 1901. (Historical Monument)

Lions' Den building, built in 1901. (Historical Monument)

Candle/Citadelle Grotto was built by Combaz, father and son, in 1868. Its leveling and construction is unique and represents zoological and grotto garden designs in the 19th C. (Historical Monument + represents distinct architectural trend)

The Zoo contains a historical bridge designed by Gustave Eiffel in 1911. (Historical Monument + represents distinct architectural trend)

Bear House, built in 1896. (Historical Monument)

3 wooden pergolas, resembling onion-shaped Indian style, which is a unique design element in the Zoo.

Japanese Kiosk, built in 1899. Design and architectural trend is unique compared to all other buildings in the Zoo.

(Historical Monument + represents distinct architectural trend)

The Administration Building was built in 1898, representing neo-classical architectural design trend. (Historical Monument)

The Zoological Museum was built in 1914, representing neo-classical architectural design trend. (Historical Monument)

Nahdat Masr St.

Cairo University St.

Charle Degui St. (Murad St.)

Radwan El Tayeb St.

Criteria Colour Coding: C1.1   C1.2   C1.3   C1.4   C1.5   C2.1   C3.1

Fig. 6. Features vs. Criteria Analysis for Giza Zoo (El-Tarabily 2003; Flower 1903; Wilkinson 2014; Battesti 2006; Singerman and Amar 2006; Shahine 1999; ElShahed 2011).

5.3. Criteria Fulfillment

According to the analysis executed above, each of the criteria under which Giza Zoo lies were examined in relation to the design elements and key features present in the garden itself. As presented in Table 4,he frequency of the existence of each criterion is identified, such that the number of elements pointing towards a certain criterion are marked and measured to recognize the intensity of manifestation of the given criterion.

Table 4. Features vs. Criteria statistics for Giza Zoo

	C1.1	C1.2	C1.3	C1.4	C1.5	C2.1	C3.1	**Total**
Number of Features / criterion	3	-	13	-	1	-	1	**18**

5.4. Criteria Analysis and verification

From the summarized data in table 4, it is apparent that the criterion most commonly satisfied by the design features of the Giza Zoo is C1.3 (stating that the site is a historical garden, contains a historical monument, or related to a historical design trend, well-known landscape designer or design elements). This relates highly to the presence of many historical design buildings and design elements in the garden that go back to its original design in the 19th century.

The second highly present criterion is C1.1 (related to the representation of a certain architectural or technological features of a certain culture). This is highly related to the fact that some of the Giza Zoo buildings represent certain time eras distinctively. For example, the Candle Grotto is a unique example of organic construction with clay and stone famous in the 19th Century. Another example is the classical buildings that represent the neo-classical architecture of the 19 Century.

Criterion C1.5 is also satisfied according to the study (stating that the site is unique example a certain type of resource). This is quite evident since Giza Zoo is the first and the only Zoo in Cairo, and the only zoo in Egypt with this area and quota of animals.

Giza Zoo also satisfies criterion C3.1 (stating that the garden provides opportunities for public enjoyment and/or scientific study). The Giza Zoo is the most famous garden in Egypt and it is visited by thousands of citizens from Cairo and even other cities (specifically during the annual festival; Eid ElFetr).

Summing up the analysis of Giza Zoo would conclude that it is of distinctively high cultural and historical value, whether studied separately or compared to other gardens (e.g. Orman Garden). ***It contains more than 18 different features that qualify Giza Zoo to be identified as a culturally valuable historical garden in Cairo with no doubt or hesitation.***

6. Discussion

It is significant to review the outputs of this research in comparison with the originally tackled issue. The consequent proposal resulting from this research manages to confront and change factors that cause the current deterioration of parks in Egypt. Coherently, lack of clear and precise management system is an issue that the research has primarily handled. Another dilemma was the absence of knowledgeable in the preservation and management of parks, handled through emphasizing the role of experts during the documentation and recommendations phases, whether specialized individuals, agencies or NGOs. The problem of poor quality also directly related to the issue of lack of expertise.

In terms of proposal verification, understanding that the suggested criteria are actually measurable and coincide with the features that are present in the Egyptian parks and gardens is a proof in itself that the proposed methodology is valid. This was obtained through the application of the criteria on the features and characteristics of one of the major historical parks in Egypt, which is Giza Zoo. This zoological garden represents layers of Egyptian history in a single setting. This application has shown that the Zoo has various items that fit under a spectrum of criteria from those proposed, which reassures the overlapping between the reality of Egyptian parks and the proposed framework for identification.

As for further research built on this proposal, this might include investigating the initiation of community parks in relation to local culture, which can deal with the poor distribution of parks by establishing green areas in urban districts with low citizen quota for open green spaces.

7. Conclusion

Egyptian historical parks are valuable heritage worthy of preservation and utmost priority by the community and authorities alike, specifically when the current situation in Egyptian cities is in grave need of usable open spaces. This research is simply an attempt to address the obstacles in this regard and find pragmatic solutions through management. The research concluded a realistic proposal that identifies and manages existing historical parks with respect to global benchmarks as well as the Egyptian local identity and culture. Verified by local experts in the field in Egypt, the proposal affirms clear mission, criteria and process of inscription and management of historical parks in Egypt and could be applied for current and future challenges for Egypt's parks.

References

Abd El Aziz, N. (2012). *Designing and Managing Urban Parks to Improve the Quality of Life in the Egyptian Cities.* (Doctor of Philosophy in Urban and Regional Planning PhD), Cairo University, Cairo, Egypt.

Battesti, Vincent. 2006. "The Giza Zoo: Reappropriating Public Spaces, Reimagining Urban Beauty." *Cairo Cosmopolitan: Politics, Culture, and Urban Space in the Globalized Middle East*, 489–512.

BCN. (2013). Barcelona Green Infrastructure Plan 2020: Summary.

Birnbaum, C. (2013). TCLF Overview. In N. Abdel-Rahman (Ed.).

El-Tarabily, A. 2003. *Ahiaa of the Great Cairo, El-Tarabily Plans*. Cairo.

ElShahed, Mohamed. 2011. "Giza Zoo 1891." *Cairobserver*.

Flower, S.S. 1903. *Zoological Gardens. Plan and Guide Book*. 2nd Editio. Cairo.

FUNCI. (1999). About Us.   Retrieved 18th of October, 2013, from http://www.funci.org/13english/about/

Legal Catalonia Portal: The Catalan Cultural Heritage, 9/1993 C.F.R. (1993).

Lipský, Z., & Romportl, D. (2007). Classification and typology of cultural landscapes: Methods and Applications.

Martin, F. (2013a). Med-O-Med Framework. In N. Abdel-Rahman (Ed.).

Martin, F. (2013b). Med-O-Med Inventory. In N. Abdel-Rahman (Ed.).

Med-O-Med.   (2010).   Cultural   Landscapes,   Classification.   Retrieved   19th   of   October,   2013,   from http://medomed.org/2010/cultural-landscapes-classification/

Med-O-Med. (2013). Med-O-Med, Cultural Landscapes of the Mediterranean and Middle East, Second Phase 2013-2016: FUNCI.

Med-O-Med. (2015). Med-O-Med Countries.   Retrieved 25th of June, 2015, 2015, from http://medomed.org/med-o-med-countries/

NPS. (2005). National Park Service Strategic Plan FY 2001-2005.

NPS. (2006). Management Policies 2006.

NPS. (2009a). About Us.   Retrieved 16th of September, 2013, from http://www.nps.gov/aboutus/index.htm

NPS.   (2009b).   Evolution   of   an   idea.   Retrieved   16th   of   September,   2013,   from http://www.nps.gov/americasbestidea/templates/timeline.html

NPS. (2010). Criteria for New Parklands.

RiveroEspais, M. (2013). Barcelona City Council Biodiversity Plan. In N. Abdel-Rahman (Ed.).

Shahine, Gihan. 1999. "Life Behind Bars." *Al-Ahram Weekly*, June.

Singerman, D., and P. Amar. 2006. *Cairo Cosmopolitan: Politics, Culture, and Urban Space in the New Globalized Middle East*. AUC Press.

TCLF. (2001). What's Out There.   Retrieved 1st of September, 2013, from http://tclf.org/landscapes

Wilkinson, Alix. 2014. "Gardens in Cairo Designed by Jean-Pierre Barillet-Dechamps" 38 (1): 124–49.

UNESCO's World Heritage Centre. (2008). World Heritage Information Kit.

UNESCO's World Heritage Centre. (2012). Operational Guidelines for the Implementation of the World Heritage Convention.

UNESCO. (2010). Origins of UNESCO.   Retrieved 17th of May, 2013, from http://www.unesco.org/new/en/unesco/about-us/who-we-are/history/